Operator's, Organizational, Maintenance Manual
for
Sink Unit, Surgical Scrub, Field

(NSN 6545-01-429-6715)

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SP0200-96-C-8509

Description of Notes in Manual

Notes Are used to alert the user of the manual to pertinent facts and conditions.

Warning Applies when there is a possibility of personal injury.

Caution Applies when there is a possibility of damage to the equipment.

WARNING

HIGH VOLTAGE is used in the operation of this equipment. DEATH MAY RESULT ON CONTACT.

Be careful not to contact high voltage connections when installing or operating this equipment. SHUT OFF and UNPLUG the POWER SUPPLY to the equipment before beginning work on it. This equipment must be either connected to a grounded power distribution system or connected to a ground rod.

WARNING

Proper voltage must be selected during setup to prevent injury to the user or damage to the equipment.

WARNING

Do not operate under pressure before removing primer bulb and attaching pressure regulator.

WARNING

If foot pedal remains depressed and source water is not supplied to the unit, the heater unit will continue to operate until it reaches the thermostat cutoff temperature (122° F).

Following resumption of source water flow, the water coming out of the faucet may be **SCALDING HOT.** Allow the water to run for approximately 30 seconds until comfortable.

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HOW TO USE THIS MANUAL

This manual provides a usable source of reference that will assist you in preparing, operating, and maintaining the Sink Unit, Surgical Scrub, Hospital, Field, NSN 6545-01-429-6715.

The manual is arranged in three chapters that are further broken down into sections. Appendixes, Figures (illustrations), and Tables are included to help you locate any item in this manual.

All paragraphs and figures are assigned numbers keyed to the chapter and sequence in which they appear. For example, Figure 2-1 is the first figure in chapter 2, and Figure 2-2 is the second figure in chapter 2. Pages are in numerical sequence by chapter.

To operate the Sink Unit, Surgical Scrub, Hospital, Field, you must know:

1. How to assemble, disassemble, and pack the equipment
2. How to start and adjust the water flow to the sink
3. When the sink is working properly and when it is not
4. How to clean the sink and perform preventive maintenance checks and services (PMCS)
5. How to use the troubleshooting procedures
6. When to call for help

The Table of Contents will help you locate the answers to your problems quickly. Just turn to the chapter that deals with your question and follow the instructions.

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1–1 Scope

1–1.1 **Type of Manual:** Operator's, Organizational, Maintenance Manual

1–1.2 **Equipment Name:** Sink Unit, Surgical Scrub, Field (hereinafter referred to as ***Portable Scrub Sink***)

1–1.3 **Purpose of Equipment:** Provides a lightweight, easily assembled system that heats and dispenses potable water used for routine hand washing and surgical scrubbing in a field medical facility.

1–2 Preparation for Storage and Shipment (Refer to page 3–3)

Section II. EQUIPMENT DESCRIPTION AND DATA

1–3 Equipment Characteristics, Capabilities, and Features

1–3.1 **Characteristics:** Provides a lightweight, easily assembled system that heats and dispenses potable water.

1–3.2 **Capabilities and Features:**

- Uses pressurized or non-pressurized water sources
- Operates from 115V or 230V, 60/50 Hz power sources
- Portable

1–4 Location and Description of Major Components

1–4.1 The illustration presented below (Figure 1–1) identifies the major components of the Portable Scrub Sink.

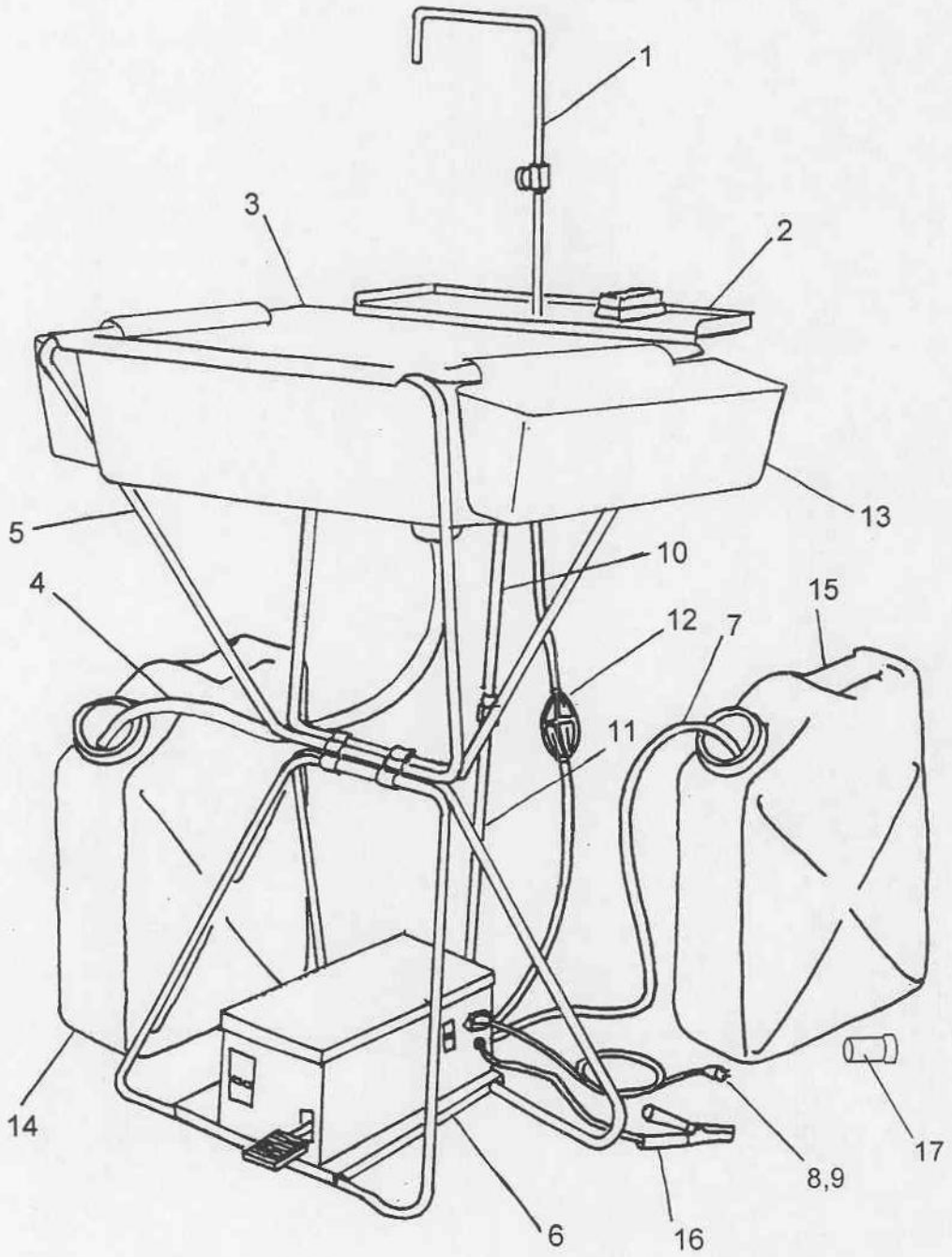


Figure 1–1. Major Components of the Portable Scrub Sink

1–4.2 A brief description of each major component is given below:

1. **Faucet**. Dispenses water to the sink basin.

2. **Convenience Tray**. Provides space to keep surgical soap and scrub brushes. Bracket on underside holds and provides height adjustment for faucet.

3. **Basin**. Sink basin made of high-density polyethylene (plastic).

4. **Drain Hose**. Tygon tubing (3/4") that attaches to bottom of basin with a brass hose connector to channel waste water into the waste water can.

5. **Frame Assembly.** The basic support framework.

6. **Control Box**. Contains the water heater, pump, flow control valve, ground fault circuit interrupter, power converter, electrical circuitry, and 115/230V power source switch. (For details see page F2, Table F1.)

7. **Inlet Hose**. Inserts into the potable water can or attaches to pressurized water source with a brass hose connector, and allows the water to be pumped to the control box.

8. **Power Cord**. Connects 115 VAC power source to the control box.

9. **Power Cord**. Connects 230 VAC power source to the control box. This cord is stripped on one end to allow attachment of the various international plugs.

10. **Upper Support Rod**. Supports sink in conjunction with the lower support rod.

11. **Lower Support Rod**. Supports sink in conjunction with the upper support rod.

12. **Outlet Hose (and Primer Pump)**. Used to prime pump.

13. **Brush Pocket**. Use for scrub brush storage. Two are provided; use is optional.

14. **Waste Water Can**. Five-gallon water can that stores wasted water drained from the basin.

15. **Potable Water Can**. Five-gallon water can that contains the potable water supply.

16. **Ground Cable**. Provides ground path on ungrounded electrical systems.

17. **Pressure Regulator**. For use with pressurized water source, attached to inlet hose.

1–5 Physical Data

1–5.1 Dimensions

(1) Portable Scrub Sink (Assembled)

Length	23 inches
Width	23 inches
Height with faucet clamped 10 inches above basin	46.5 inches
Weight	25 pounds

(2) Storage Container

	Type Zero Cage 19178	Type Hardigg Cage 11214
Length	29.5 inches	28 inches
Width	27.5 inches	26 inches
Height	14.5 inches	15 inches
Weight (Empty)	34 pounds	32 pounds
Weight (Packed)	59 pounds	57 pounds

1–5.2 Power

AC - 115/230 volt, 60/50 Hz

1–6 Water Source

Use only potable water from either a pressurized or non-pressurized source.

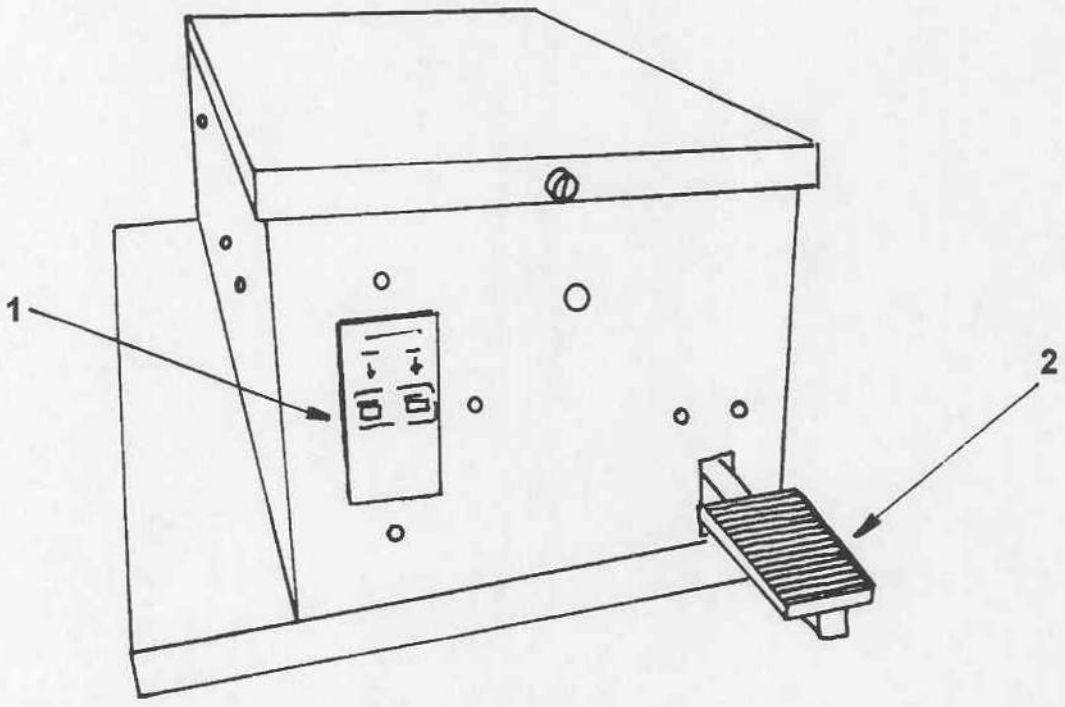
CHAPTER 2

OPERATING INSTRUCTIONS

Section I. DESCRIPTION AND USE OF OPERATOR'S CONTROLS AND INDICATORS

2–1 Foot Pedal

When the foot-operated pedal is depressed, the water pump and heater are activated, allowing the water to be circulated, heated, and then pumped out of the faucet (Figure 2–1). Releasing the pedal shuts off the water pump and heater and stops the flow of water to the faucet.



1. Ground Fault Circuit Interrupter
2. Foot Pedal

Figure 2–1. Front View of Control Box, Foot Pedal, and Ground Fault Circuit Interrupter

2–2 Ground Fault Circuit Interrupter (GFCI)

WARNING

Disconnect power cord before working on this equipment. The control box contains potentially dangerous voltages on some components even with the Ground Fault Circuit Interrupter (GFCI) off.

2–2.1 The GFCI (Figure 2–1) shuts off power to the pump and heater in the event of an electrical insulation failure. To test the GFCI, depress and hold the foot pedal while simultaneously pressing the Test button on the front of the control box. The Reset button on the front of the control box should pop up, and the pump and heater should turn off. If the pump and heater still operate after pushing the Test button, unplug the Portable Scrub Sink and call Medical Maintenance. After testing, reset the GFCI by pressing the Reset button; it should stay depressed.

2–2.2 The GFCI is also the On/Off switch for the Portable Scrub Sink pump and heater. To turn off the unit (such as during the priming operation), press the Off button (labeled Off/Test). To turn on the unit, press the On button (labeled On/Reset).

2–3 Flow Control Knob

The flow control knob (Figure 2–11) is located on the faucet assembly and is used to adjust the flow of water from different water sources. It is designed to prevent complete flow stoppage.

The flow is increased by turning the knob counterclockwise and is reduced by turning it clockwise. This is normally adjusted when the Portable Scrub Sink is set up, to produce an acceptable water flow rate.

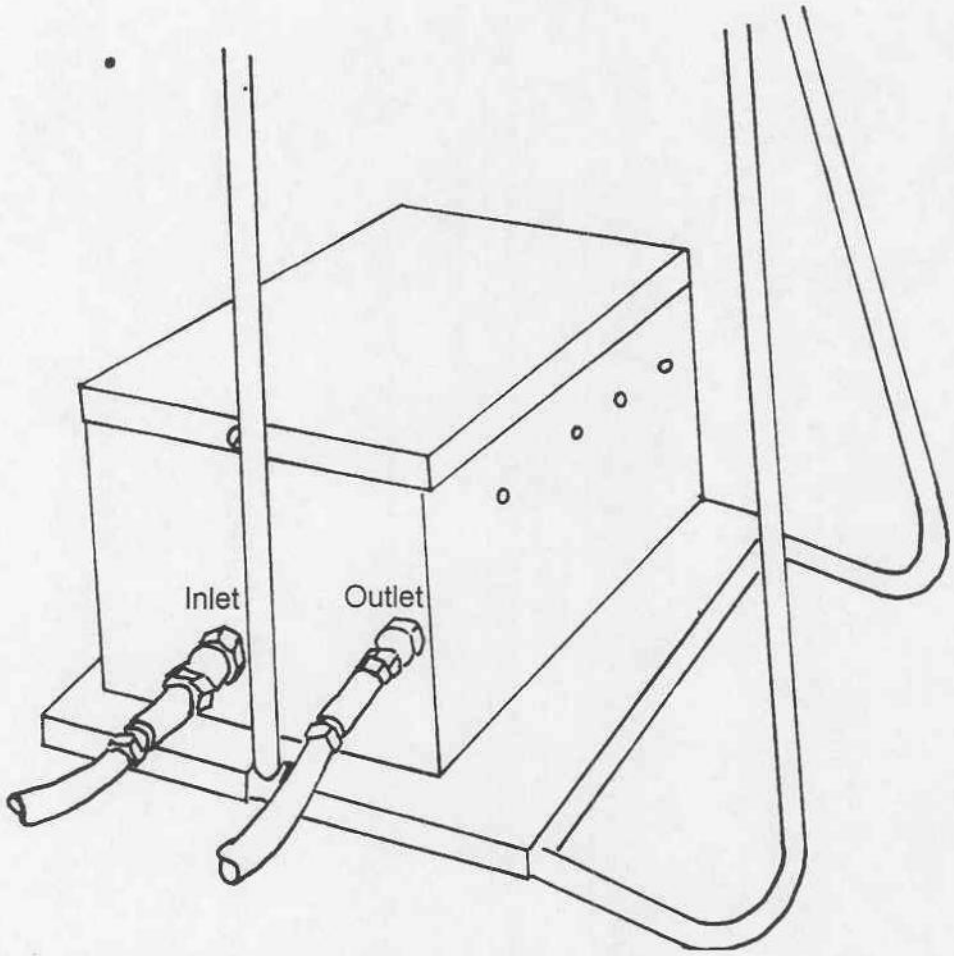


Figure 2–2. Back View of Control Box, Outlet and Inlet Hoses

2–4 Primer Bulb

The primer bulb is located in-line in the outlet hose, and is used to prime the pump in the control box. Squeezing the bulb several times while depressing the pedal draws water from the potable water can through the inlet rod and hose to the control box. The water continues to be drawn through the pump and heater and then through the outlet hose to the faucet. When air bubbles are not visible in the water running through the outlet hose, discontinue priming. The sink does not have to be primed again unless the water supply is interrupted. Water will continue to flow until the foot pedal is released. To restart the flow of water, depress the foot pedal again.

WARNING

The primer bulb must be removed before operating with pressurized water source. See page 2–21.

Note: The Portable Scrub Sink can be operated during electrical power loss (see paragraph 2–12).

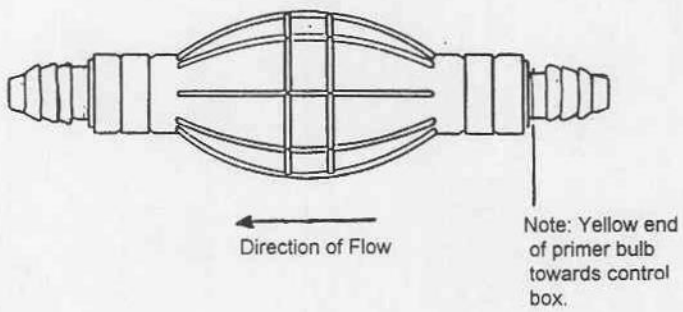


Figure 2–3. Primer Bulb

2–5 Power Converter Switch, Receptacle, Power Cords and Ground Cable

Proper operating voltage must be selected depending on what voltage (115/230 V) is available.

2–5.1 **Power Converter Switch.** The power converter switch (Figure 2–4) is located on the right side of the control box.

2–5.2 **Power Receptacle.** The power receptacle is mounted on the right side of the control box and is compatible with both power cords.

2–5.3 **Power Cords.** Two power cords are supplied with the Portable Scrub Sink:

- One cord has a plug end for 115 VAC electrical power found in most of North America, Japan, and some developing countries. The socket end can be connected to either a 115 V or 230 V power source.

- One cord has a plug end for 230 VAC power found in most of Continental Europe. The socket end can be connected to either a 115 V or 230 V power source. This cord is stripped on one end to accept the variety of plugs used in Continental Europe.

2–5.4 **Ground Cable.** The ground cable provides grounding if the electrical supply system is ungrounded. The ground cable may also be used with grounded electrical systems as an additional safety measure.

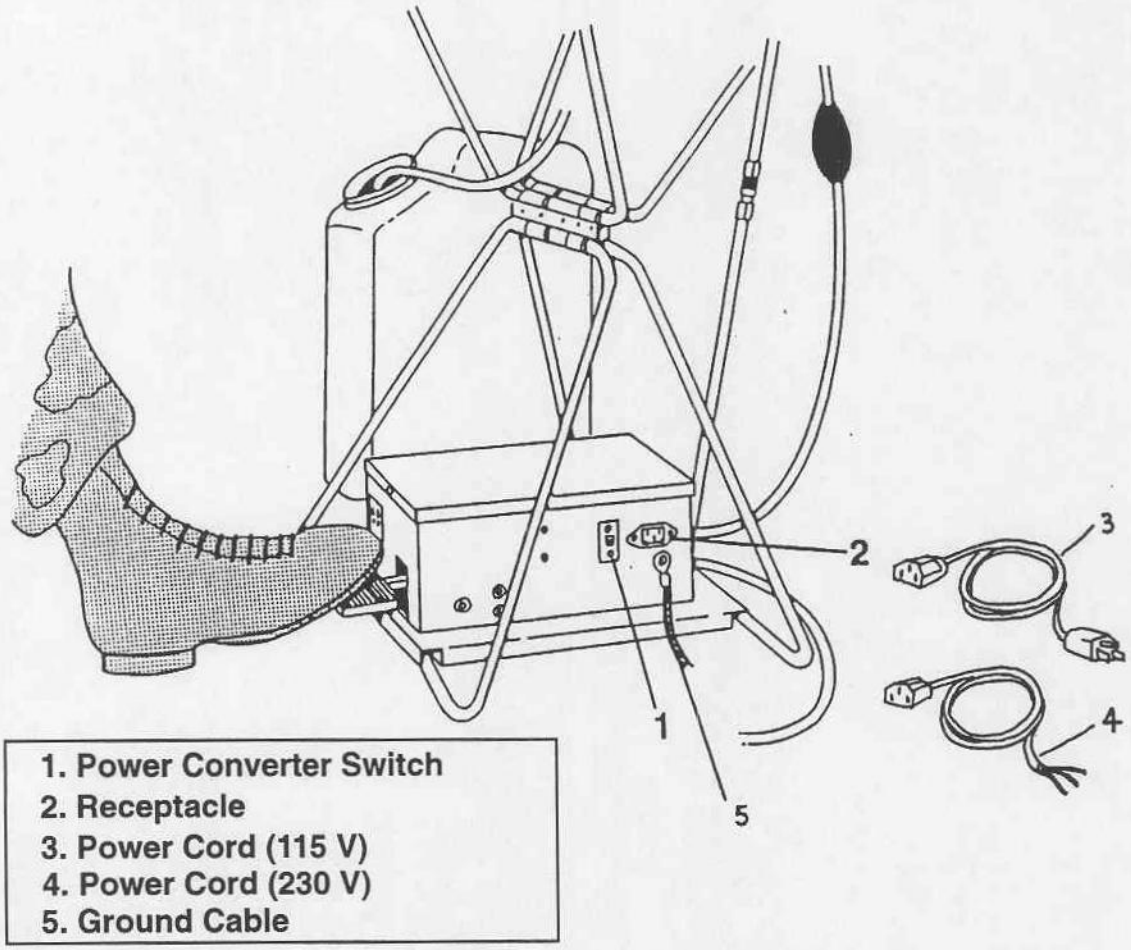


Figure 2–4. Power Converter Switch, Receptacle, Cords, and Ground Cable

Section II. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

2–6 PMCS Table

Table 2–1 provides instructions for PMCS at the operator level.

2–6.1 **Item No.** Column (1). Each item to be checked is numbered in this column. Always do PMCS in the same order according to this number.

2–6.2 **Interval.** (Column 2). This column shows the interval at which the check is to be performed. An asterisk (*) is shown in the appropriate sub-column to identify the frequency with which it should be performed. All PMCS are to be performed as scheduled.

2–6.3 **Items to be Inspected Procedure.** (Column 3). This column describes the item to be inspected and provides instructions for performing the check.

2–6.4 **Equipment is Not Ready/Available** (Column 4). This column identifies the problem and describes why the Portable Scrub Sink should not be used until repaired.

Table 2–1. Operator's Preventive Maintenance Checks and Services (PMCS)[a]

Item No.	Interval B	D	A	Items to be Inspected Procedure Check for and Have Repaired, Replaced, or Adjusted as Needed	Equipment is Not Ready/ Available if:
1	*	*		**BASIN** Check fuse clips for damage.	Fuse clips do not fit securely to frame assembly.
2	*			**CONVENIENCE TRAY** a. Visually check bracket on underside of convenience tray for damage. b. Check thumbscrew by turning clockwise and counterclockwise. (Do not overtighten.)	Tray bracket is missing or damaged. Thumbscrew is missing and/or faucet is not held at the correct height.
3	*	*		**FAUCET** Visually check for dents, other signs of damage, and leaks.	Faucet cannot be inserted through hole on convenience tray or leaks are present.
4	*			**FRAME ASSEMBLY**	

Table 2–1. Operator's Preventive Maintenance Checks and Services (PMCS)[a] (Continued)

Item No.	Interval B	Interval D	Interval A	Items to be Inspected Procedure Check for and Have Repaired, Replaced, or Adjusted as Needed	Equipment is Not Ready/ Available if:
				Visually check for dents, cracks, corrosion, or missing or broken parts.	Damage interferes with operation.
5	*			**SUPPORT RODS** Visually check support rod disconnect for coupling ability.	Support rod disconnect will not mate properly.
6	*	*		**CONTROL BOX: EXTERIOR SURFACE, FOOT PEDAL, AND FITTINGS** Visually check for dents, cracks, corrosion, missing/broken parts, and leaks.	Damage interferes with operation or leaks are present.
7	*	*	*	**POWER CORD AND HOSES** a. Check power cord and hoses for signs of damage, excessive wear, and loose/ improper connections. b. Check hoses for leaks.	Power cord worn/damaged. Hoses have leaks.
8	*			**GROUND FAULT CIRCUIT INTERRUPTER** Check GFCI function.	GFCI does not trip when tested or will not reset.
9	*			**FLOW CONTROL KNOB** Turn knob all the way counterclockwise and then clockwise.	Flow control knob doesn't turn.
10	*			**PRIMER BULB** Check for signs of damage, cracks, missing/ broken connections.	There are apparent signs of damage.
11	*			**POWER CONVERTER SWITCH** Check for proper voltage selection.	Switch is in the incorrect position and cannot be moved.

a. These PMCS are to be performed in the order listed. **B** - Before daily operation. **D** - During operation. **A** - After operation.

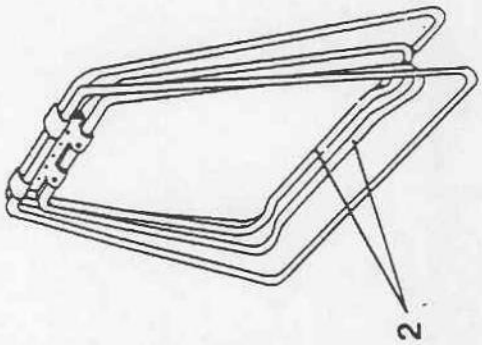
Section III. OPERATION UNDER USUAL CONDITIONS

2–7 Unpacking/Assembly

To prepare the Portable Scrub Sink for use, follow these steps:

2–7.1 Remove hoses, brush pockets, convenience tray, control box, frame assembly, support rods, and faucet from the shipping container.

2–7.2 Unfold frame so that the longer legs are in the up position and the shorter legs are on the ground (Figure 2–5).



1. Upper Legs
2. Lower Legs

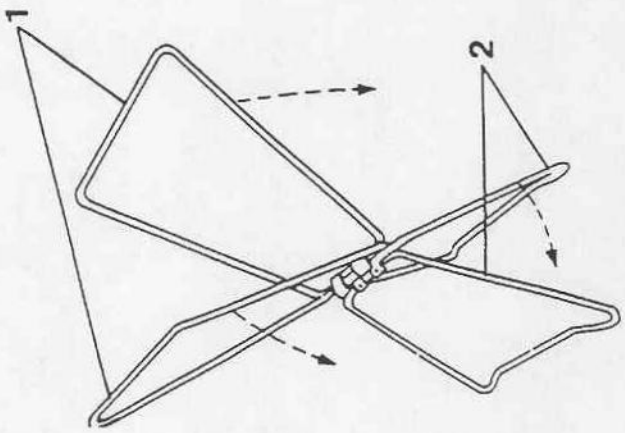


Figure 2–5. Unfolding the Frame

2–7.3 Attach the control box onto the frame by hooking over the lower leg of the frame. Then, using your foot to keep the frame stationary, hook the other side. Adjust the position of the legs so that the control box fits snugly on the frame (Figure 2–6).

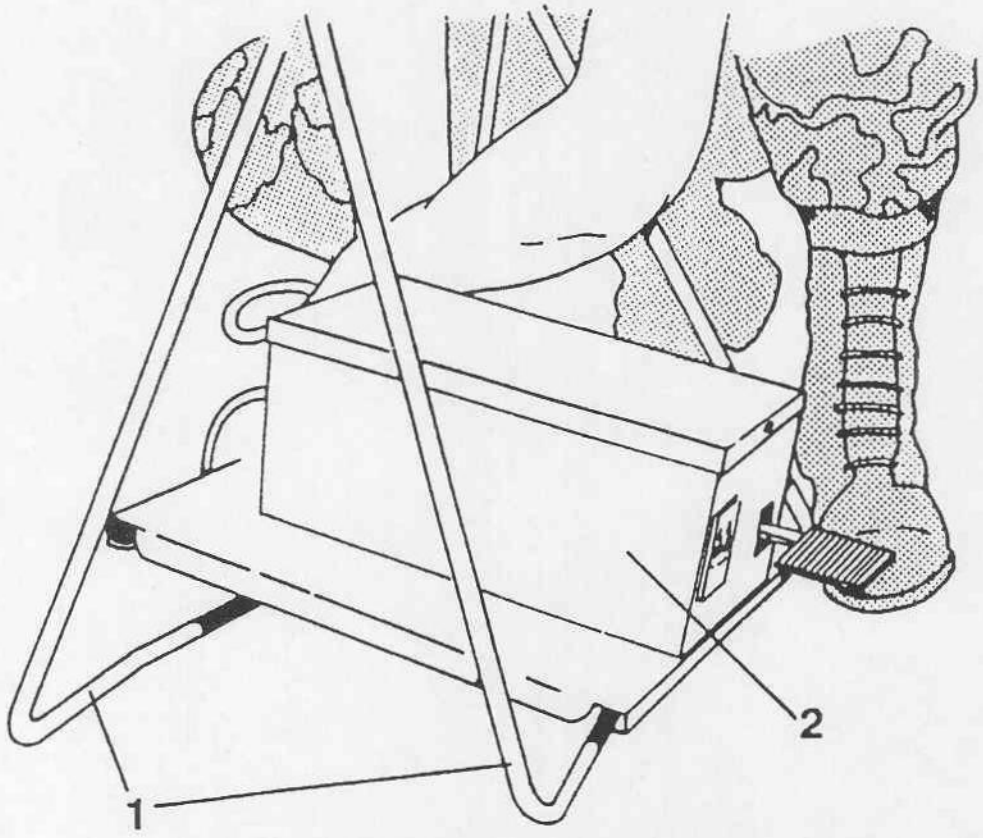
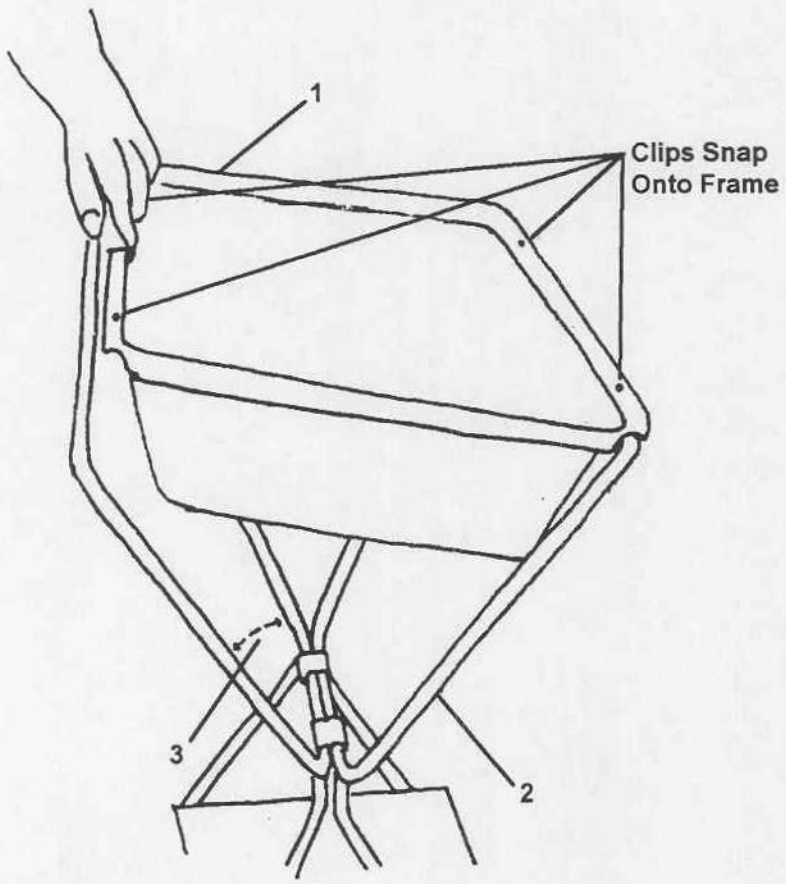


Figure 2–6. Attachment of Control Box to the Frame

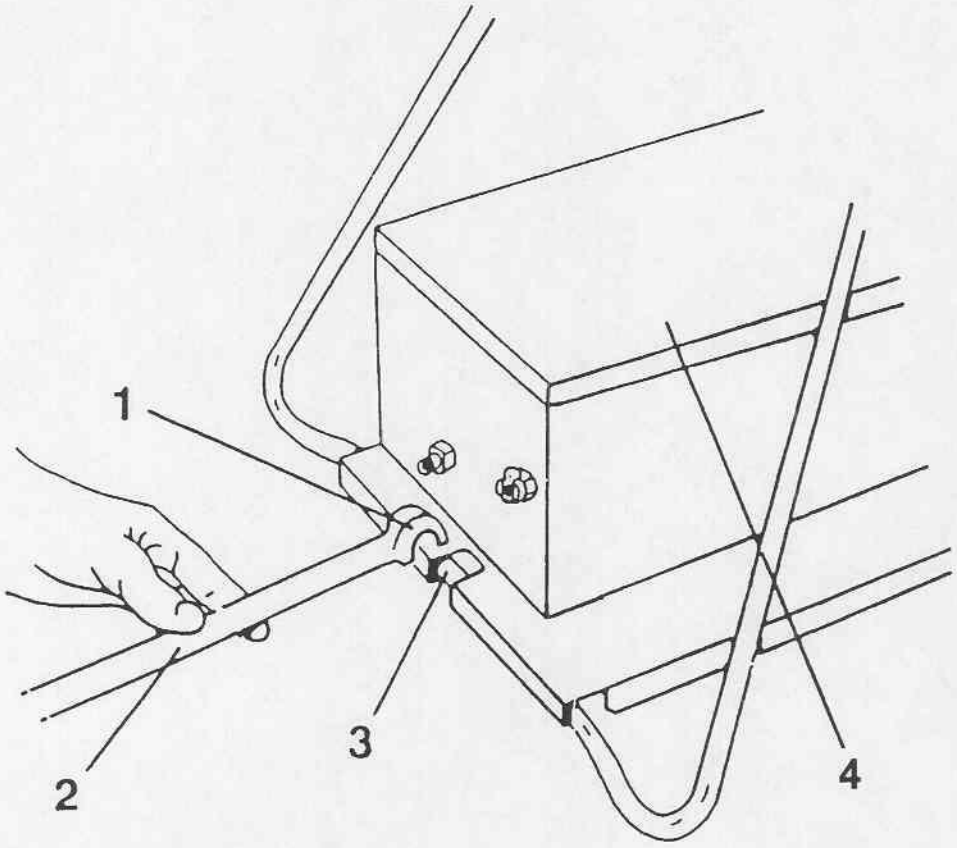
2–7.4 Attach the basin to the frame assembly by pressing the fuse clips underneath the basin rim on the upper legs of the frame assembly, and adjusting the legs as shown (Figure 2–7).



1. Basin Frame
2. Frame Assembly
3. Adjust Upper Legs

Figure 2–7. Attachment of Basin to Frame Assembly

2–7.5 There are two support rods. The upper support rod has a male disconnect (plug) on one end and a threaded stud on the other end. The lower support rod has a female disconnect on one end and a hook on the other end. Attach the hook of the lower support rod through the cutout in rear of control box with hook opening down. Let lie until ready to attach to upper support rod (Figure 2–8).



1. Hook
2. Lower Support Rod
3. Cutout
4. Control Box

Figure 2–8. Attachment of Lower Support Rod

2–7.6 Place the convenience tray in position (same side as cutout on control box base) on frame assembly by fitting the slot of the tray bracket onto the frame assembly. Continue to hold the tray in position and screw the threaded stud of the upper support rod into the tray bracket (Figure 2–9). When hand tight, loosen connection a half turn.

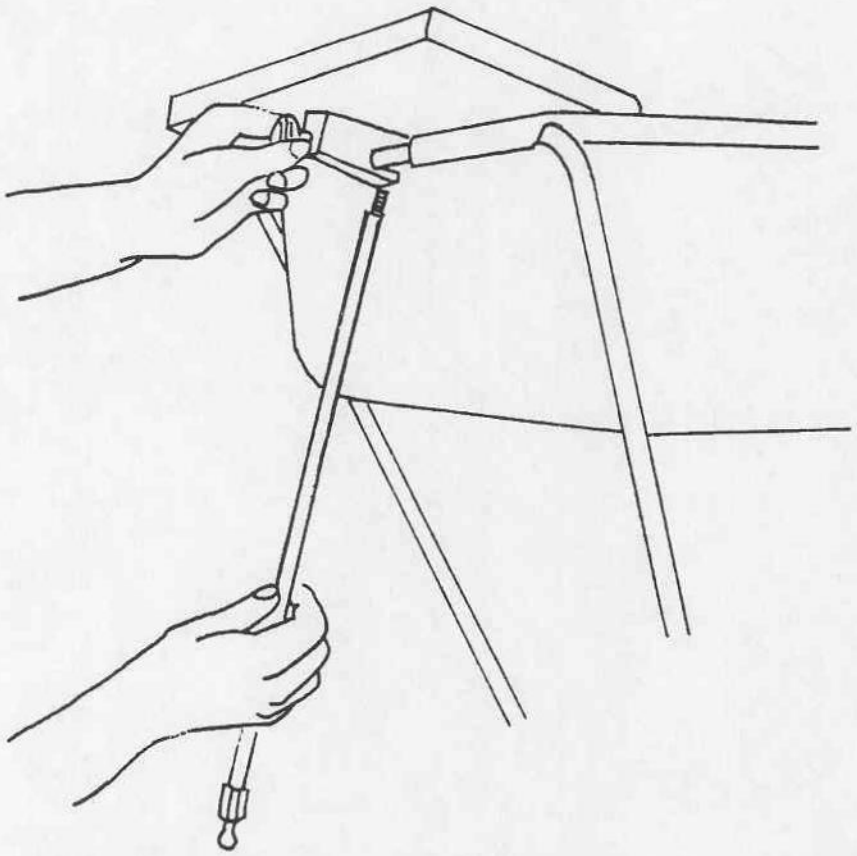
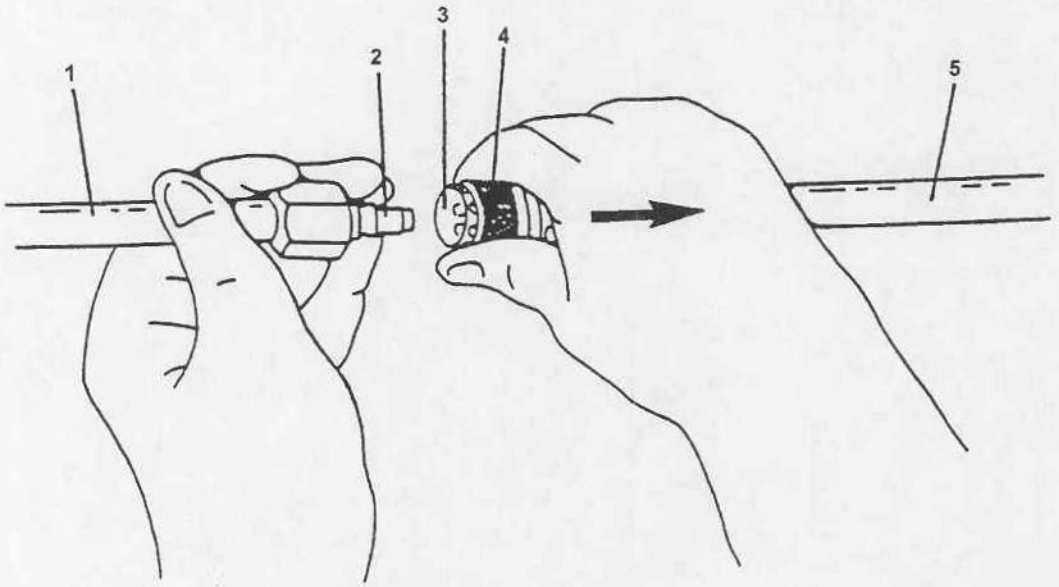


Figure 2–9. Attachment of Convenience Tray and Upper Support Rod

2–7.7 Lift lower support rod and connect to upper support rod by pulling down the collar of the female disconnect and inserting male disconnect from the upper support rod (Figure 2–10). Now retighten the upper support rod and convenience tray connection.



1. Upper Support Rod
2. Male Disconnect
3. Female Disconnect
4. Collar
5. Lower Support Rod

Figure 2–10. Quick Disconnect

2–7.8 Loosen the thumbscrew (turn counterclockwise) located on the underside of the convenience tray and lower the faucet through the hole in the top of the tray. Adjust height of faucet to level desired. Slightly tighten the thumbscrew clockwise to hold the faucet in the tray (Figure 2–11). (Over tightening of the thumbscrew will cause damage to the faucet.)

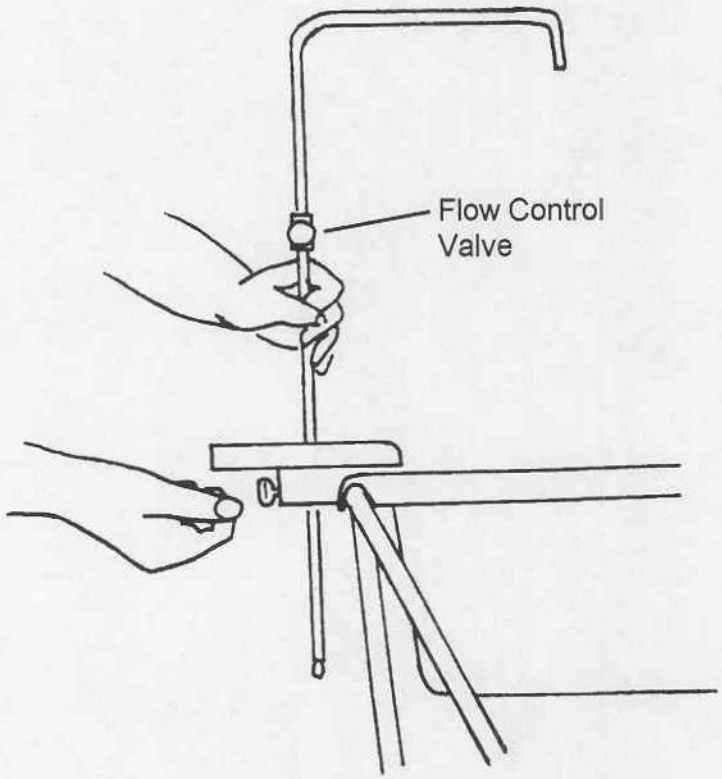


Figure 2–11. Attachment of Faucet to Convenience Tray

2–7.9 Position the brush pocket on the side of the basin and snap into place (Figure 2–12).

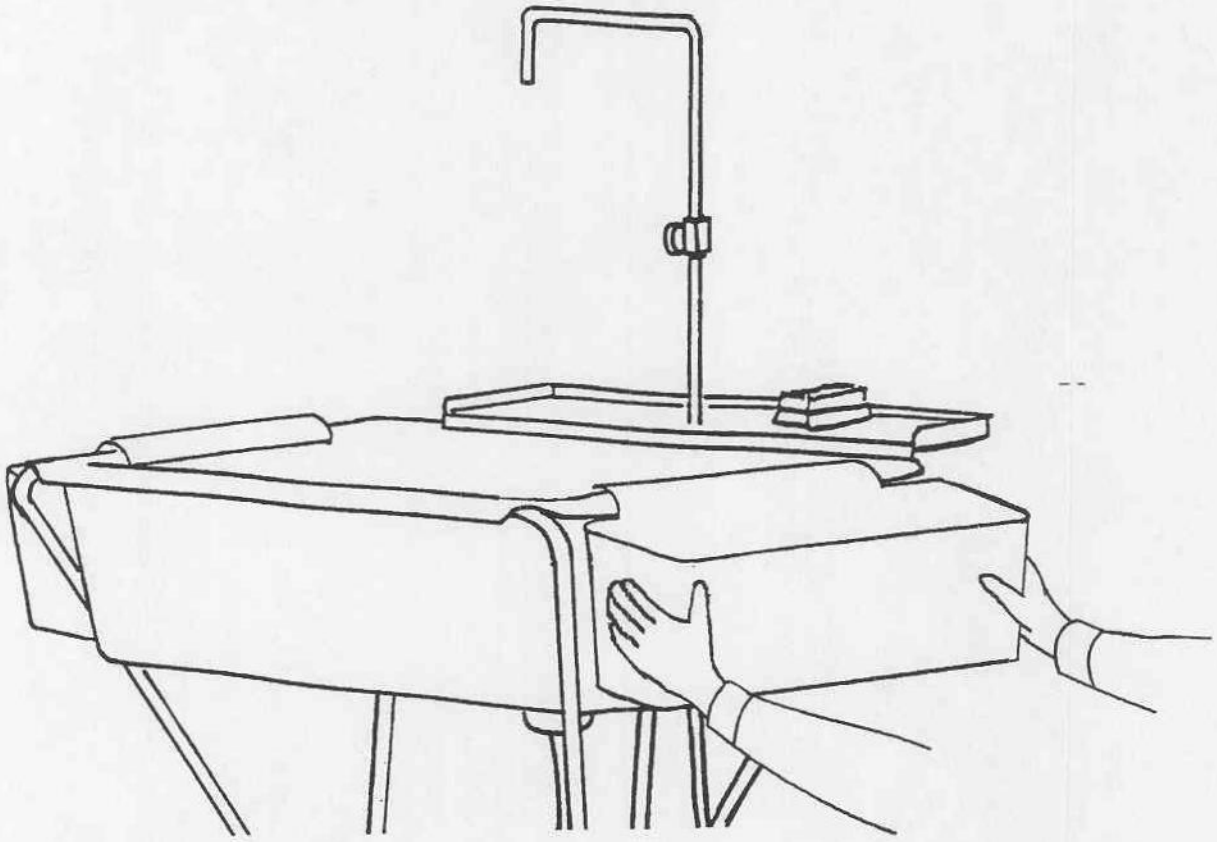


Figure 2–12. Attachment of Brush Pocket to Basin

2–7.10 Place the brass hose connector end of the inlet hose in the potable water can. (If pressurized water source is used, see paragraph 2–7.11.3.2).

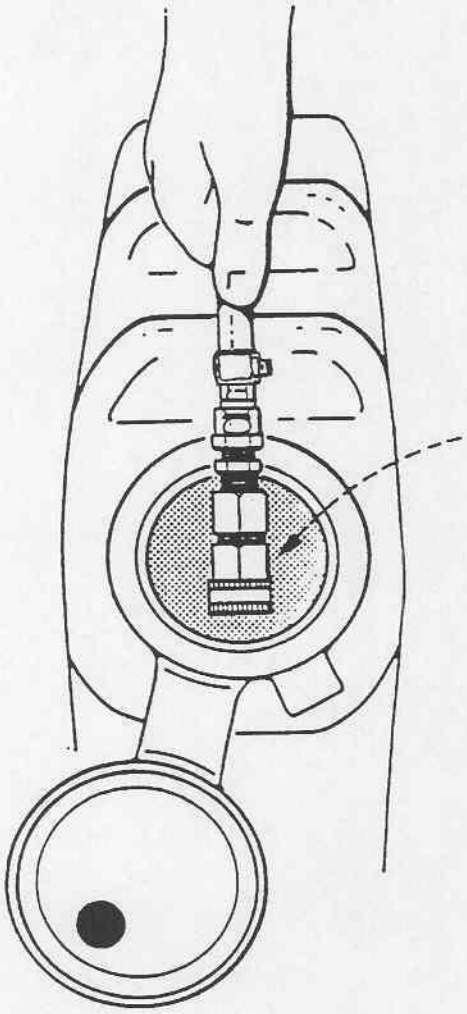


Figure 2–13. Inlet Hose

2–7.11 There are three hoses: drain hose, outlet hose, and inlet hose (Figure 2–14).

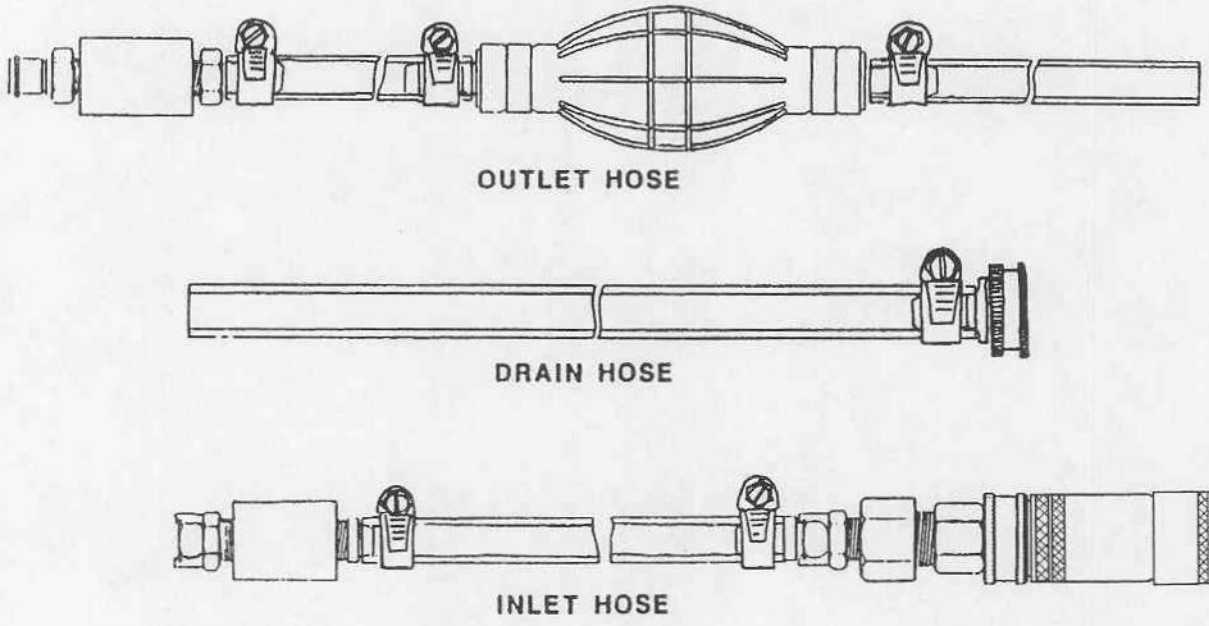


Figure 2–14. Hoses

2–7.11.1 The drain hose has a brass swivel hose connector on one end. Attach the hose connector to the drain fitting of the basin and place the other end of the hose in the waste water can.

2–7.11.2 The outlet hose has a male quick coupling on one end, the primer bulb in the middle, and no coupling on the other end. The male quick coupling connects to the female outlet coupling on the control box, and the opposite end slides over the barbed fitting on the faucet.

2–7.11.3 The inlet hose has a female quick coupling on one end and a male quick coupling on the other end. Attached to the male quick coupling is a female quick coupling and brass connector. When pressurized water source is used, the pressure regulator must be attached to the brass connector.

2–7.11.3.1 **Non-pressurized water source:** Connect the female quick coupling to the male inlet coupling on the control box and place the brass hose connector inside the potable water can. (If dust is a problem, depress the latching mechanism on the brass hose connector and separate the brass hose connector from the inlet hose. Slide the inlet hose through the small hose in the cap

of the water can and reattach the brass hose connector.) Make sure the brass hose connector lies on the bottom of the water can.

2–7.11.3.2 **Pressurized water source:** Depress the latching mechanism on the brass hose connector and separate the brass hose connector from the inlet hose. Connect the brass hose connector to the pressure regulator. A 3/4 inch water hose can now be connected to the pressure regulator. Reattach the brass hose connector/pressure regulator to the inlet hose assembly.

2–7.12 Open the flow control knob (if closed) by turning counterclockwise three full turns.

CAUTION

The primer bulb must be removed and the pressure regulator must be attached before operating with pressurized water source.

2–7.13 When facing the front of the sink, place the waste water can preferably on the left side of the frame. The free end of the drain hose will be placed into this can. If using a non-pressurized water source, place the potable water can preferably on the right of the frame. Insert the inlet hose (Figure 2–13) into the potable water can.

CAUTION

Failure to place the power converter switch in the proper position when operating from 230V power sources will result in severe damage to the control box components.

2–7.14 If the Portable Scrub Sink is being used with 115 V power, position the power converter switch to 115 V (up). If the Portable Scrub Sink is being used with 230 V power, position the power converter switch to 230 V (down).

2–7.15 Select the appropriate power cord for the available power supply voltage. Connect female end of the cord to the power receptacle on the control box and the male end of the cord to the power supply.

2–7.16 Attach ground cable to a ground stake using the plier clip, or attach the ring terminal on the end of the ground cable to the generator ground stud.

2–8 Operation From a Non-Pressurized Water Source

2–8.1 Make sure the power cord is unplugged. Turn the flow control knob, which opens the valve, counterclockwise to fully open. Prime the pump by depressing the foot pedal (Figure 2–1) and squeezing and releasing pressure on the primer bulb (Figure 2–3) continuously until a steady stream of water flows from the faucet and there are no air bubbles visible in the outlet hose. Priming can then be discontinued, and the foot pedal can be released. Make sure the power converter switch is in the proper position (see paragraph 2–7.14). Connect the power cord to the power source and depress the Reset button on the Ground Fault Circuit Interrupter (see paragraph 2–2.1).

2–8.2 Depress the foot pedal and hold to run the water. If the water will not flow from the faucet, release foot pedal and press the Reset button located at the Ground Fault Circuit Interrupter panel on the front of the control box (see paragraph 2–2.1). If water still does not flow, re-prime the pump as described in paragraph 2–8.1 above. If re-priming the pump fails, call Medical Maintenance.

2–8.3 To regulate the flow of water, depress the foot pedal and adjust the flow control valve (Figure 2–11) by turning counterclockwise to increase flow or clockwise to decrease flow.

2–8.4 For further operation, depress the foot pedal to start water flow. The control box is designed to maintain water temperature between 85° and 105° F. If the water is not heated, call Medical Maintenance.

2–8.5 Periodically check the potable water can and refill as needed by adding more potable water from another can. If the end of the inlet rod is pulled out of the water inside the can, it will interrupt the siphon and the pump will have to be re-primed.

2–8.6 Periodically check the waste water can and empty as needed. Ensure waste water is disposed of in accordance with unit waste disposal Standard Operating Procedures (SOP).

2–9 Operation From a Pressurized Water Source

WARNING

Do not operate under pressure until primer bulb is removed and pressure regulator is attached to swivel hose connector on the inlet hose! (See Figure F–7 on page F-10 and Figure F–8 on page F-12.) Remove parts 1 and 2 from the outlet hose and connect part 2A directly to the inlet hose.

Snap inlet hose onto the inlet hose connection on control box. Ensure that the flow control knob is opened. Connect pressurized water hose to pressure regulator. Turn on water source; connect power cord to power source; continue as described in paragraph 2–8.3.

2–10 Disassembly

The Portable Scrub Sink must be cleaned and thoroughly drained before storage to prevent freeze damage or corrosion in the control box.

2–10.1 Clean the basin and tray with a disposable scrub brush (Use *Brush, scrub nail and hand,* item 2, Appendix E), and thoroughly rinse the basin, the brush pocket, and the tray. Dry with a clean cloth (Use *Cloths, cleaning,* item 1, Appendix E).

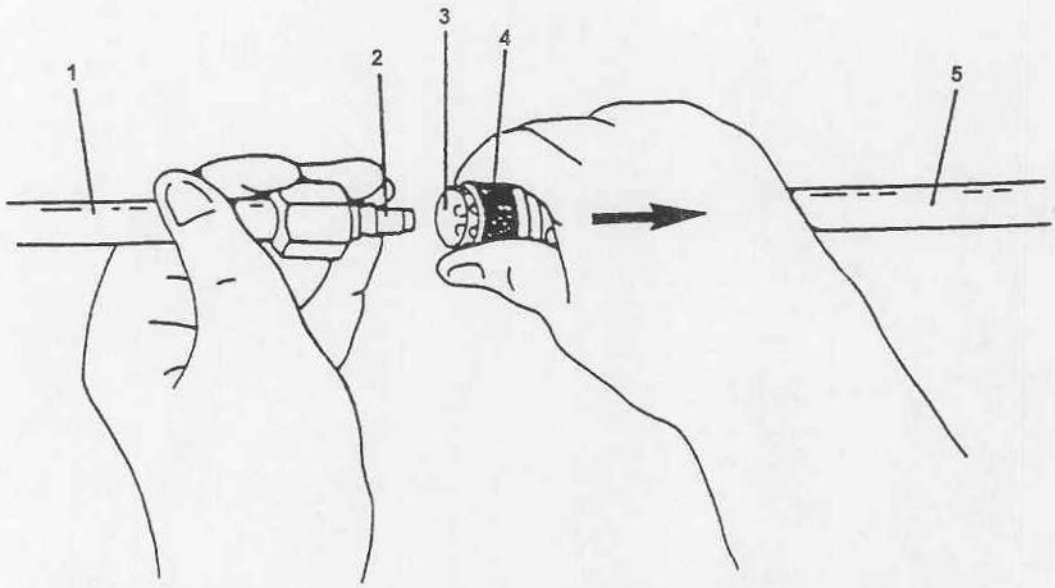
2–10.2 Disconnect the power plug.

2–10.3 Remove the inlet hose from the potable water can. If operating from a pressurized source, turn off tap and disconnect the pressure regulator. Depress the foot pedal until no water flows from the faucet.

2–10.4 Disconnect the drain hose and drain remaining water into waste water can.

2–10.5 Disconnect the outlet hose at faucet, turn the thumbscrew on the underside of the convenience tray counterclockwise, and remove faucet.

2–10.6 Turn upper support rod one-half turn clockwise. Disconnect support rods by pulling knurled collar down. While holding convenience tray, unscrew upper support rod from tray bracket and remove (Figure 2–15). Remove the convenience tray. Unhook lower support rod from frame assembly.



1. Upper Support Rod
2. Male Disconnect
3. Female Disconnect
4. Collar
5. Lower Support Rod

Figure 2–15. Detachment of Support Rods

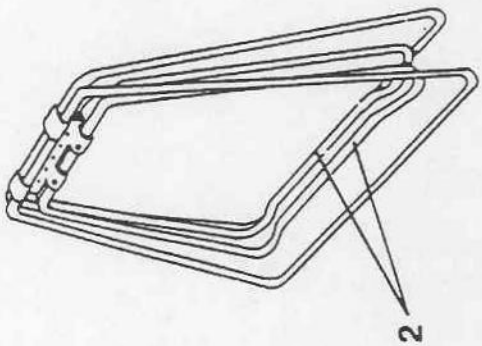
2–10.7 Remove and drain the hoses.

2–10.8 Detach the control box from the frame and place on the floor. Raise the foot pedal end of the control box and press the foot pedal to drain any remaining water in the box.

CAUTION

Frame does NOT fold completely flat. Hinge stays on a slight angle.

2–10.9 Fold frame assembly carefully by bringing lower legs together. Bring upper legs down as shown (Figure 2–16).



1. Upper Legs
2. Lower Legs

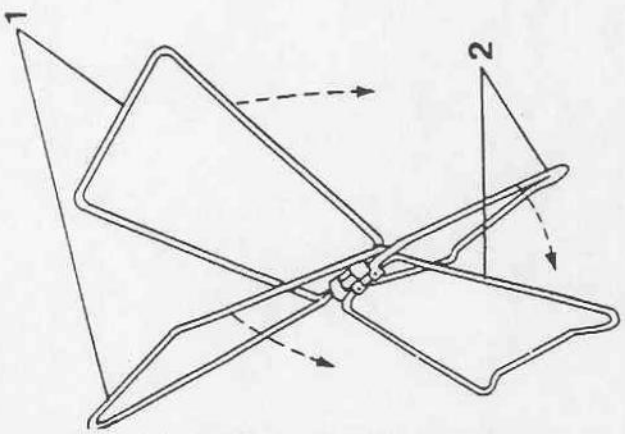


Figure 2–16. Folding the Frame Assembly

2–10.10 Wipe down all equipment with a clean cloth, and place disassembled items alongside shipping container for packing.

2–10.11 Empty the water cans in accordance with unit waste disposal SOP.

2–10.12 See Chapter 3, Section IV, for procedures for packing the Portable Scrub Sink in shipping container.

Section IV. OPERATION UNDER UNUSUAL CONDITIONS

2–11 Low Environmental Temperatures

CAUTION

When the outside temperature is LOW (35° F or below) and the Portable Scrub Sink is being operated in an UNHEATED ENVIRONMENT, the Portable Scrub Sink MUST BE SHUT DOWN AND DRAINED DAILY to prevent damage due to freezing of components.

2–11.1 To prevent damage during daily operation, the water in the potable water can should be PREHEATED during the initial priming procedure.

2–11.2 To preheat the water in the potable water can:

a. Turn flow control knob fully counterclockwise.

b. Remove hose from faucet and put the end in the potable water can.

c. Depress the foot pedal for approximately 15 minutes to let the water circulate and heat.

d. When the water is heated, release the foot pedal, remove the hose from the potable water can, and reconnect the hose to the faucet.

e. Sink is ready for operation.

2–12 Loss of Power

The Portable Scrub Sink is designed to allow operation during a power loss by raising the potable water can above the level of the faucet and depressing the foot pedal.

CHAPTER 3

MAINTENANCE INSTRUCTIONS

Section I. LUBRICATION INSTRUCTIONS

3–1 Lubrication

The Portable Scrub Sink does not require lubrication.

Section II. OPERATOR'S TROUBLESHOOTING PROCEDURES

3–2 Troubleshooting Procedures

Table 3-1 lists the common malfunctions you may find during the operation of the Portable Scrub Sink. You should perform these tests/inspections and take corrective actions in the order listed.

3–2.1 This manual cannot list all malfunctions that may occur, all tests or inspections, and all corrective actions. If a malfunction is not listed or is not corrected by listed corrective actions, notify your supervisor.

Table 3–1. Operator's Troubleshooting Procedures

Malfunction	Test or Inspect	Corrective Action
1. PUMP WILL NOT PRIME	a. Check water level in potable water can.	Refill if needed.
	b. Foot pedal not depressed.	Depress foot pedal.
	c. Check inlet and outlet hoses for loose connections.	Snug up hose connections if needed.
	d. Check hoses for kinks and/or crimping.	Straighten hoses; make sure water cans are not sitting on hoses.
	e. Check to see if flow control knob is in closed position.	Turn flow control knob to fully open position.
	f. Check inlet and outlet hoses to ensure they are not plugged/ clogged.	Clean out the hose if needed.
	g. Primer bulb defective.	Replace.
2. NO FLOW FROM FAUCET	a. Check for tight connection between power plug and receptacle.	Reconnect tightly.
	b. Check power cord and plug for visible defect(s).	Notify Medical Maintenance.
	c. Check ground fault circuit interrupter.	Reset as necessary.
	d. Flow control valve may be closed.	Turn flow control knob three full turns counterclockwise.
	e. Hoses could be kinked or clogged.	Straighten or flush.
	f. Check for proper voltage selection on power converter switch.	Position switch to proper voltage.
3. WATER NOT HEATED	Water should feel warm to touch (85-105° F).	Notify Medical Maintenance.
4. GROUND FAULT CIRCUIT INTERRUPTER ACTIVATES	Press Reset Button.	If GFCI fails to reset, *immediately* disconnect power cord and call Medical Maintenance.
5. BASIN LEAKS	Visually check for holes in plastic.	Replace basin.

Section III. OPERATOR MAINTENANCE

3–3 Operator Maintenance Tasks

3–3.1 Clean the basin and brush pocket with a scrub brush (Use *Brush, scrub nail and hand,* item 2, Appendix E) daily, rinse well, and dry with a clean cloth (Use *Cloths, cleaning,* item 1, Appendix E).

3–3.2 Wipe down all external surfaces with a clean cloth (Use *Cloths, cleaning,* item 1, Appendix E) in accordance with unit Standard Operating Procedures.

Section IV. PREPARATION FOR STORAGE OR SHIPMENT

3–4 Scope

This section describes where the main components of the Portable Scrub Sink should be stored in the shipping container. Illustrations are provided to help identify the main components of the Portable Scrub Sink and where they are to be placed in the shipping container.

3–5 Positioning of Components in Shipping Container

3–5.1 Place the faucet, upper and lower support rods, 230 V power cord, and the folded frame assembly into the shipping container as shown in Figure 3-1.

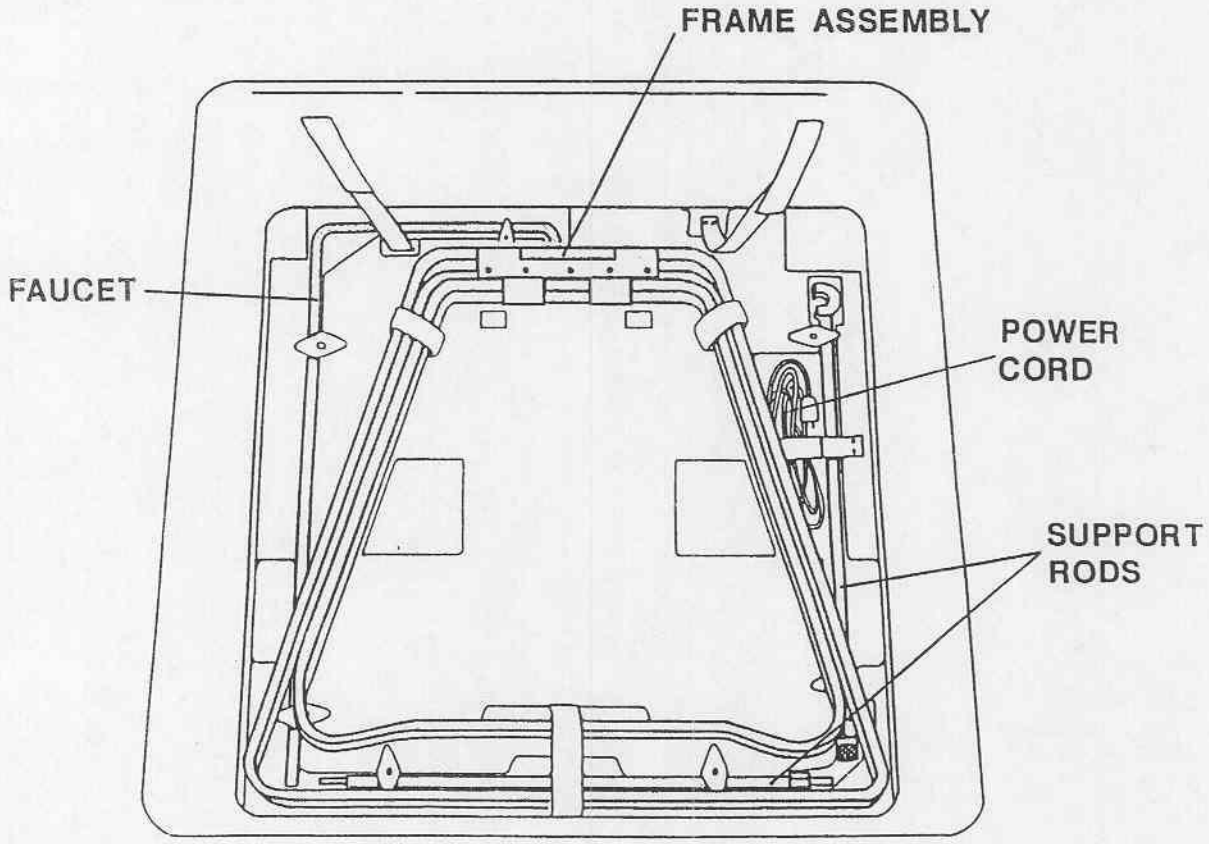


Figure 3–1. Storage of Faucet, Support Rods, 230 V Power Cord, and Frame Assembly

3–5.2 Invert the convenience tray and place it in the shipping container as shown in Figure 3-2.

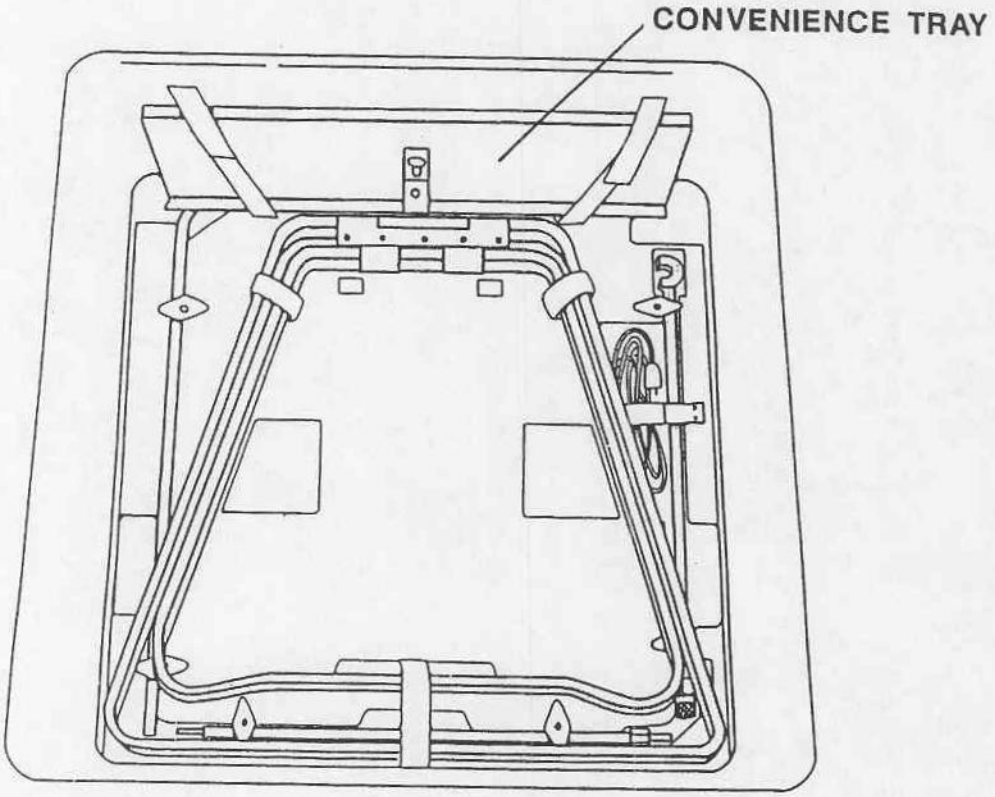


Figure 3–2. Storage of Convenience Tray

3–5.3 Invert the control box and place it in the shipping container. Then wrap the hoses around the control box and place power cords as shown in Figure 3-3. Place this manual on top of the control box.

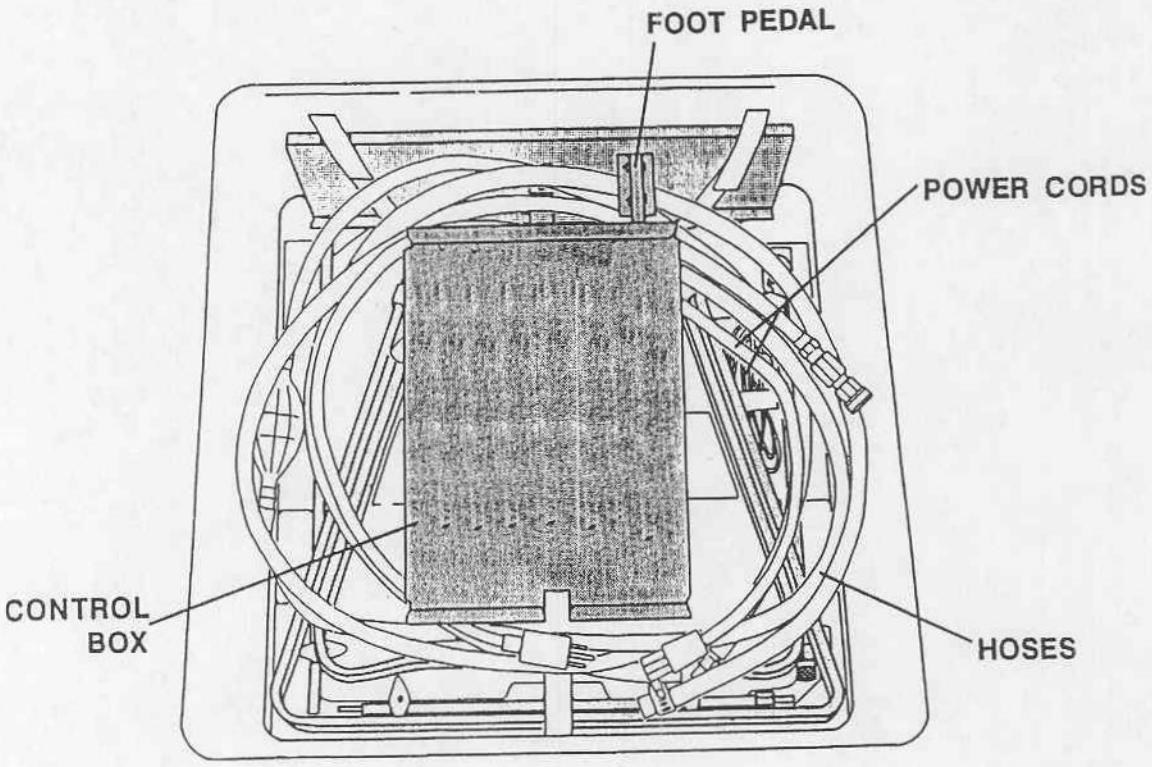


Figure 3–3. Storage of Control Box, Hoses and Power Cords

3–5.4 Invert the basin and position it over the control box, then place the side brush pockets face up on each side of the inverted basin.

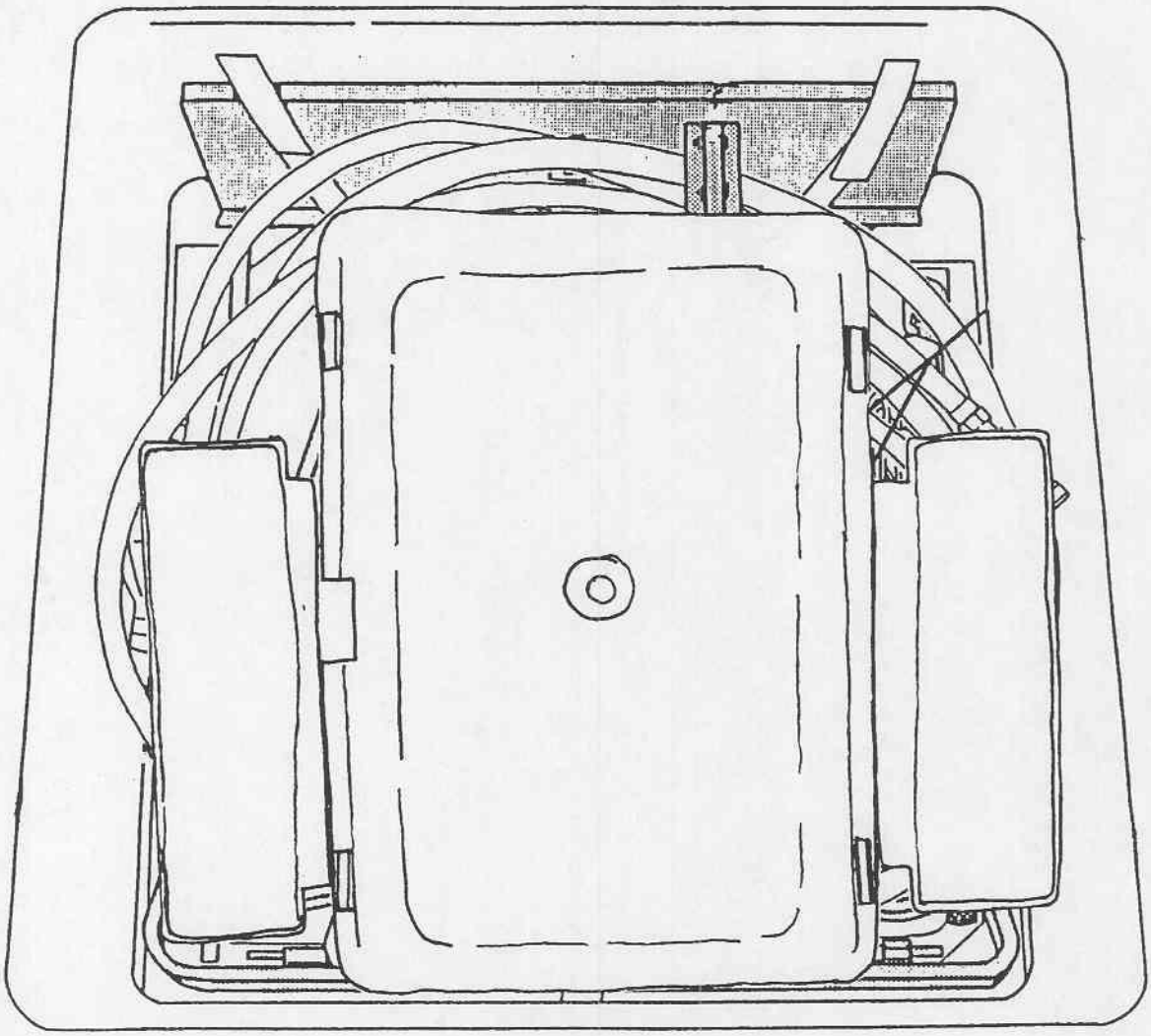


Figure 3–4. Storage of Basin and Side Pockets

3–5.5 Close the top of the shipping container. Turn the wing nuts on the fasteners counter-clockwise until the hooks are fully extended. Place each hook over the lip of the cover and hold each hook in place while turning the wing nuts clockwise to tighten the hook, then flip the wing down. The Portable Scrub Sink is now ready for shipping.

CHAPTER 4

ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

Section I. REPAIR PARTS, SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT

4–1 Common Tools and Equipment

For authorized common tools and equipment, refer to the Modification Table of Organization and Equipment (MTOE) applicable to your unit.

4–2 Special Tools, TMDE, and Support Equipment

No special tools or support equipment are required for maintenance of the Portable Scrub Sink. The TMDE required to maintain the Portable Scrub Sink is listed in the maintenance allocation chart (MAC) in Appendix B of this manual.

4–3 Repair parts are listed and illustrated in Appendix F of this manual.

Section II. TROUBLESHOOTING PROCEDURES

4–4 Scope

This section provides troubleshooting guidance relative to the Portable Scrub Sink. This section is for the use of organizational maintenance personnel and is to be used in conjunction with the operator's troubleshooting procedures in paragraph 3–2.

4–5 Problem Analysis

- **Problem.** Column (1) lists major symptoms that may be encountered when operating the Portable Scrub Sink.
- **Probable Cause.** Column (2) provides the malfunctions that are most likely to occur.
- **Remedy.** Column (3) provides the appropriate action(s) necessary to correct each malfunction.

Table 4–1. Organizational Maintenance Troubleshooting Procedures

Problem	Probable Cause	Remedy
1. PUMP WILL NOT PRIME	a. Primer bulb defective.	Replace bulb.
2. NO WATER FLOW FROM FAUCET (pump is running)	a. Water flow control valve not open.	Open valve.
	b. Worn or damaged pump impeller.	Replace pump impeller. Refer to paragraph 4–6.11.
	c. Clogged or plugged water lines, valves, or pump impeller.	Clean and replace as needed.
3. PUMP MOTOR WILL NOT RUN	a. No power to unit.	Provide proper power.
	b. GFCI tripped.	Reset GFCI.
	c. Fuse F1 defective.	Replace fuse.
	d. Voltage converter defective.	Replace converter. Refer to paragraph 4–6.8.
	e. Power converter switch defective.	Replace switch. Refer to paragraph 4–6.9.
	f. Pump motor defective.	Replace pump motor. Refer to paragraph 4–6.2.
4. WATER WILL NOT HEAT	a. GFCI tripped.	Reset GFCI.
	b. Heater power cord or thermostat defective.	Replace heater power cord or thermostat. Refer to paragraph 4–6.3.
	c. Heater defective.	Replace heater element. Refer to paragraph 4–6.3.
	d. Foot pedal microswitch out of adjustment.	Adjust foot pedal microswitch for proper operation.
	e. Foot pedal microswitch defective.	Replace foot pedal microswitch. Refer to paragraph 4–6.6.
5. GROUND FAULT CIRCUIT INTERRUPTER CANNOT BE RESET	a. Improper incoming power supply.	Verify incoming power.
	b. GFCI defective.	Replace GFCI. Refer to paragraph 4–6.4.
	c. Short circuit or excessive current leakage.	Troubleshoot and repair as needed.

Section III. MAINTENANCE PROCEDURES

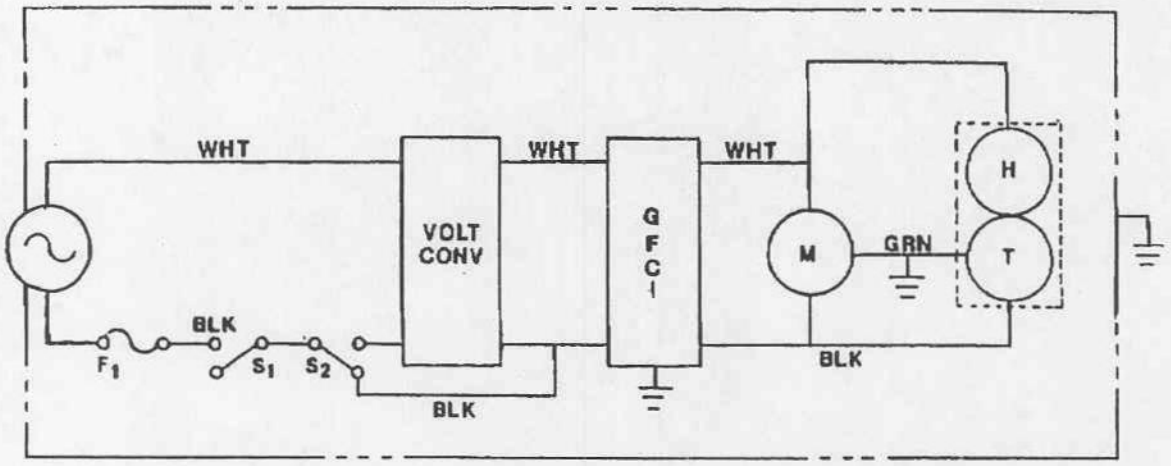


Figure 4–1. Schematic Diagram

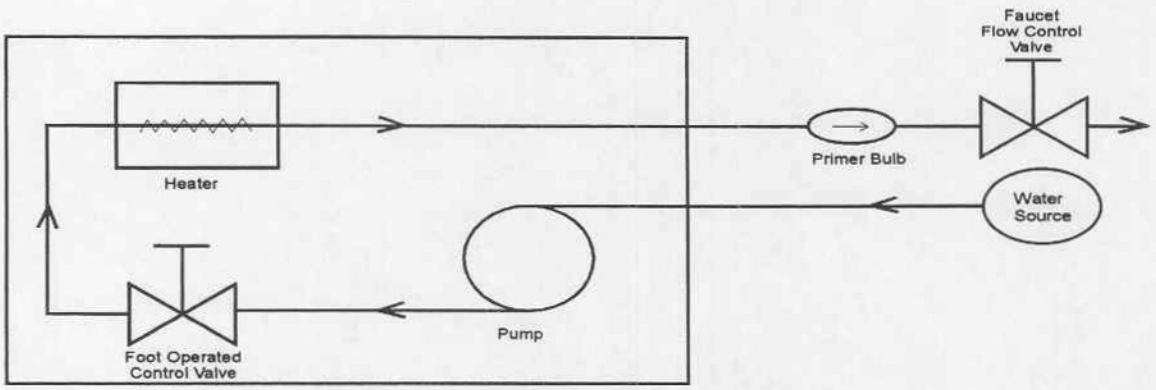


Figure 4–2. Plumbing Diagram

4–6 Replacement of Components

This section provides the proper sequence of procedures for the removal and replacement of malfunctioning components of the Portable Scrub Sink.

WARNING

Disconnect power cord before attempting repairs.

Note: All pipe threads should be sealed with Teflon® tape.

4–6.1 Flow Control Valve/Faucet Assembly

a. Remove outlet hose assembly from faucet assembly.

b. Remove faucet assembly from convenience tray by loosening the thumbscrew located under the tray and sliding the faucet assembly out of the tray.

c. Unthread the lower and upper faucet tubes from the control valve.

d. For replacement, reverse the above steps; however, use Teflon tape on all new threaded components.

4–6.2 Replacement of Water Pump

a. Loosen two screws for control box cover, remove cover.

b. Remove inlet fitting.

c. Remove 1" tube nut and withdraw the tygon tubing from the fitting.

d. Disconnect power cord from power strip.

e. Remove the two screws and hex nuts at the base of the pump.

f. Remove the pump.

g. Remove outlet fitting and place on outlet of replacement pump.

h. For replacement, reverse the above steps.

4–6.3 Replacement of Heater/ Thermostat Element

a. Loosen two screws for control box cover, and remove the cover.

b. Remove all wire connections to the heater and thermostat.

c. Unthread tube connections to the heater.

d. Unscrew heater mounting screws.

e. Unscrew thermostat mounting screws.

f. Unscrew heater element from heater housing.

g. For replacement, reverse the above steps; however, use Teflon tape on all new threaded components.

4–6.4 Replacement of Ground Fault Circuit Interrupter

a. Loosen two screws for control box cover, remove cover.

b. Disconnect electrical connections at the GFCI.

c. Remove two retaining screws and lock nuts.

d. Remove GFCI.

e. For replacement, reverse the above steps.

4–6.5 Replacement of Fuse Holder

a. Loosen two screws for control box cover, remove cover.

b. Disconnect electrical connections at fuse holder.

c. Remove fuse.

d. Remove rivet and washer.

e. Remove the fuse holder.

f. For replacement, reverse the above steps.

4–6.6 **Replacement of Foot Pedal Microswitch**

a. Loosen two screws for control box cover, remove cover.

b. Disconnect electrical connections at microswitch.

c. Remove the two mounting screws and hex nuts.

d. Remove the microswitch.

e. For replacement, reverse the above steps.

4–6.7 **Replacement of Foot Operated Control Valve**

a. Loosen two screws for control box cover, remove cover.

b. Loosen and remove the 1" tube nut and tygon tubing.

c. Loosen the 9/16" tube nut on the copper line. **Do not remove copper line at this time.**

d. Remove the two screws securing the foot pedal pad.

e. Remove the foot pedal pad.

f. Remove the three screws and washers holding the foot control valve bracket, located on the lower right front of the control box.

g. Remove the valve and foot pedal arm.

h. Remove the spring pin securing the foot pedal arm to the valve.

i. Remove the lock nut securing the foot pedal arm bracket.

j. For replacement, reverse the above steps.

4–6.8 **Replacement of the Voltage Converter**

a. Loosen screws for control box cover, and remove cover.

b. Disconnect wires at the voltage converter.

c. Remove screws and nuts that attach the converter to the control box.

d. For replacement, reverse the above steps.

4–6.9 Replacement of the Power Converter Switch

a. Loosen two screws for control box cover, remove cover.

b. Unsolder the wires from switch.

c. Remove the two retaining screws and hex nuts.

d. Remove the switch.

e. For replacement, reverse the above steps.

CAUTION

Assure that the 115 V position is the upper selection after reassembly.

4–6.10 Replacement of the Power Receptacle

a. Loosen two screws for control box cover, remove cover.

b. Unsolder wires at the receptacle.

c. Remove the two retaining screws and hex nuts.

d. Remove the receptacle.

e. For replacement, reverse the above steps.

4–6.11 Replacement or Cleaning the Water Pump Impeller

a. Loosen two screws for control box cover, remove cover.

b. Remove pump as described in paragraph 4–6.2.

c. Remove the five impeller cover retaining screws.

d. Remove pump housing and plug assembly.

e. Inspect, clean, or replace worn or damaged components as needed.

f. To reassemble the pump, reverse the above steps.

4–6.12 Replacement of Upper and/or Lower Legs

a. Remove the two allen screws.

b. Remove the five screws in the hinge.

c. Remove the legs.

d. For replacement, reverse the above steps.

4–6.13 Replacement of Quick Couplings

a. Unscrew defective quick coupling from control box or hose end.

b. Apply Teflon tape to the quick coupling threads and screw it into place.

CAUTION

If a replacement quick coupling is not available, remove the mating quick coupling half from the control box or hose and remove the threaded coupling from the hose barb. Apply Teflon tape to the threads of the hose barb and screw it into the control box port formerly occupied by the quick coupling.

When packing the Portable Scrub Sink, pull the hose off the hose barb. This is a temporary measure and will shorten the life of the hoses.

4–6.14 Replacement of Gasket on Shipping Container

a. Remove old gasket and clean the groove with a mild solvent (NSN 8010-00-837-7969) to remove old adhesive.

b. Remove protective backing from new gasket and seat into the groove.

4–6.15 **Replacement of Fasteners on Shipping Container**

a. Peel the sealer material from the pop rivets on inside of container.

b. Drill out pop rivets with 1/8" drill bit, drilling from the inside of container.

c. Remove fasteners.

d. Install new fasteners using pop rivets and washers.

e. Reseal the pop rivets with RTV, NSN 8030-00-180-6339.

4–6.16 **Replacement of Handles on Shipping Container**

a. Peel the sealer material from the pop rivets on inside of container.

b. Drill out pop rivets with 3/16" drill bit, drilling from the outside of container.

c. Reuse back plate, position new handles and pop rivet in place.

d. Reseal back plate and pop rivets with RTV, NSN 8030-00-180-6339.

4–6.17 **Replacement of Pressure Relief Valve**

a. Remove hex nut on interior of container (hold pressure relief valve with fingers to remove the hex nut).

b. Remove the pressure relief valve.

c. Install new pressure relief valve and tighten hex nut.

APPENDIX A

REFERENCES

A–1 Scope

The following items can be used with this manual and should help you if needed.

A–2 Regulations/Instructions

Reporting of Transportation Discrepancies in Shipments	• AR 55-38 • NAVSUPINST 4610.33 • AFR 75-18
Joint Regulation Governing the Use and Application of Uniform Source, Maintenance, and Recoverability Codes	• AR 700-82 • OPNAVINST 4410.2 • AFR 66-45 • MCO 4400.120 • DLAR 4100.6
Reporting of Item and Packaging Discrepancies	• AR 735-11-2 • DLAR 4140.55 • NAVMATINST 4355.73 • AFR 400-54 • MCO 4430.3

A–3 Safety Manuals

National Fire Protection Association Standards for Health Care Facilities. This publication can be obtained from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269	• NFPA 99

A–4 Technical Bulletins

Quality Control Depot Serviceability Standards	• TB 740-10 • DLAM 4155.5 • AFR 67-43

APPENDIX B

MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

B–1 General

This appendix provides a summary of maintenance operations for the Portable Scrub Sink described on page 1–1 of this publication. It authorizes categories of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

B–2 Maintenance Functions

Maintenance functions will be limited to and defined as follows:

a. **Inspect.** To determine the serviceability of an item by comparing its physical, mechanical, and electrical characteristics with established standards through examination.

b. **Test.** To verify serviceability and to detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. **Service.** Operations required periodically to keep an item in proper operating condition; i.e., to clean, preserve, drain, paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.

d. **Adjust.** Maintain within prescribed limits by bringing into proper or exact position, or by setting the operating characteristics to the specified parameters.

e. **Align.** To adjust specified variable elements to electrical safety conditions and cause corrections to be made or reported.

f. **Electrical Safety Test.** To determine conformance to electrical safety conditions and cause corrections to be made or reported.

g. **Calibrate.** To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipment used in precision measurement. Consists of the comparison of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

h. **Install.** The act of emplacing, seating, or fixing into position an item, part, module (component or assembly) for an unserviceable counterpart.

i. **Remove/Replace.** To remove an unserviceable item and replace it with a serviceable like item.

j. **Repair.** The application of maintenance services (inspect, test, service, adjust, align, calibrate, replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module or component, assembly, end item, or system.

k. **Overhaul.** That periodic maintenance effort (service and action) necessary to restore an item to a completely serviceable and operational condition as prescribed by maintenance standards (e.g., DMWR) in appropriate technical publication. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like-new condition.

l. **Rebuild.** Consists of those services and actions necessary for the restoration of unserviceable equipment to a like-new condition in accordance with the original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours, miles, etc.) considered in classifying Army equipment and components.

B–3 Explanation of Columns in the MAC (see Section II)

a. **Group number**. Column (1) lists group numbers, the purpose of which is to identify components, assemblies, subassemblies and modules with the next higher assembly.

b. **Component and Assembly**. Column (2) contains the noun names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

c. **Maintenance Functions**. Column (3) lists the functions to be performed on the item listed in column 2. When items are listed without maintenance functions, it is solely for purposes of having the group numbers in the Maintenance Allocation Chart (MAC) and Repair Parts and Special Tools List (RPSTL) coincide.

d. **Maintenance Category**. Column (4) specifies, by the listing of a "work-time" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance categories, appropriate "work-time" figures will be shown for each category. The number of work hours specified by the "work-time" figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time, and quality assurance and quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the Maintenance Allocation Chart. Subcolumns of column 4 are as follows:

C - Operator/Crew
O - Organizational
F - Direct Support
H - General Support
D - Depot Level

e. **Tools and Equipment**. Column (5) specifies by code, those common tool sets (not individual tools) and special tools, TMDE, and support equipment required to perform the designated function.

f. **Remarks**. Column (6) contains a letter code, in alphabetic order, which is keyed to the remarks contained in Section IV.

B–4 Tools and Test Equipment Requirements (see Section III)

a. **Line Item.** Column (1) contains the official six-character alphanumeric line item number (LIN) assigned to the generic nomenclature.

b. **National or NATO Stock Number.** Column (2) lists the National or NATO stock number of the specific tool or test equipment.

c. **Nomenclature.** Column (3) lists the noun name and nomenclature of the tools and test equipment required to perform the maintenance functions.

d. **Maintenance Category.** Column (4) indicates the lowest maintenance level authorized to use the tool or test equipment. The codes are defined in paragraph B–3.d.

e. **Tool or Test Equipment Reference Code.** Column (5) contains the numbers that coincide with the numbers used in the Tools and Equipment column of the MAC. The numbers indicate the applicable tool or test equipment for the maintenance functions.

Section II. MAINTENANCE ALLOCATION CHART (MAC)

Table B–1. Maintenance Allocation Chart for Sink Unit Surgical Scrub, Field

(1) Group No.	(2) Component/ Assembly	(3) Maintenance Function	(4) Maintenance Category Unit					(5) Tools and Equip.	(6) Remarks
			Unit		Support				
			C	O	F	H	D		
00	Sink unit, Surgical Scrub	Inspect	X						
		Test		.5				01, 02, 03	A, B
		Electrical Safety Test		.2				05	A, B
01	Control Box	Inspect	X						
011	Foot Pedal								
0111	Foot Pedal Pad	Inspect	X						
		Replace		.2				01	
0112	Foot Pedal Arm	Inspect	X						
		Replace		.6				01, 02	
0113	Microswitch (S1)	Test		.3				01, 03	
		Replace		.2				01	
012	Voltage Converter	Test		.3				01, 03	
		Replace		.2				01	
0121	Voltage Converter Plug, Male	Inspect		.1					
		Test		.2				01, 03	
		Replace		.3				01	
013	Pump Assembly								
0131	Pump Motor	Test		.2				01, 03	
		Replace		.5				01, 02	

Table B–1. Maintenance Allocation Chart for Sink Unit Surgical Scrub, Field (Continued)

(1) Group No.	(2) Component/ Assembly	(3) Maintenance Function	(4) Maintenance Category Unit					(5) Tools and Equip.	(6) Remarks
			Unit		Support				
			C	O	F	H	D		
0132	Impeller	Inspect		.5				01, 02	
		Replace		.5				01, 03	
014	Heater Assembly	Test		.2				01, 03	
		Replace		.5				01, 02	
0141	Heater Power Cord or Thermo-stat	Inspect		.1				01	
		Test		.3				01, 03	
		Replace		.3				01	
015	Ground Fault Circuit Inter-rupter	Test	X					01, 03	
		Replace		.1				01	
016	Fuse (F1)	Test		.2				01, 03	
		Replace		.1				01	
0161	Fuse Holder	Inspect		.1					
		Replace		.2				01	
017	Power Recepta-cle	Inspect	X						
		Test		.2				01, 03	
		Replace		.2				01, 03	
018	Power Converter Switch (S2)	Inspect	X						
		Test		.2				01, 03	
		Replace		.2				01	
019	Plumbing Connections								
0191	Flow Control Assembly								
01911	Flow Control Knob	Inspect	X						
		Replace		.2				01	

Table B–1. Maintenance Allocation Chart for Sink Unit Surgical Scrub, Field (Continued)

(1) Group No.	(2) Component/ Assembly	(3) Maintenance Function	(4) Maintenance Category Unit					(5) Tools and Equip.	(6) Remarks
			Unit		Support				
			C	O	F	H	D		
01912	Flow Control Valve	Test		.3				01, 02	
		Replace		.5				01, 02	
0192	Inlet Quick Coupling								
01921	Fitting	Inspect	X						
		Replace		.2				01	
01922	O Ring	Inspect	X						
		Replace		.1				01	
0193	Outlet Quick Coupling	Inspect	X						
		Replace		.2				01	
0194	Copper Tubing	Inspect		.1				01	
		Test		.1				01	
		Replace		.5				01, 02	
0195	Tygon Tubing	Inspect		.1				01	
		Test		.1				01	
		Replace		.2				01, 02	
0196	Fittings	Inspect		.1				01	
		Test		.2				01	
		Replace		.5				01, 02	
02	Drain Hose	Inspect	X						
		Replace	X						
03	Inlet Hose	Inspect	X						
		Replace	X						
031	Quick Coupling	Replace		.2				01	

Table B–1. Maintenance Allocation Chart for Sink Unit Surgical Scrub, Field (Continued)

(1) Group No.	(2) Component/ Assembly	(3) Maintenance Function	(4) Maintenance Category Unit					(5) Tools and Equip.	(6) Remarks
			Unit		Support				
			C	O	F	H	D		
032	Tygon Tubing	Replace		.4				01	
04	Outlet Hose	Inspect	X						
		Replace	X						
041	Quick Coupling	Replace		.2				01	
042	Primer Bulb	Replace		.3				01	
043	Tygon Tubing	Replace		.5				01	
05	Power Cords	Inspect	X						
		Replace	X						
		Test		.2				01, 03	
		Repair		.5				01	
06	Convenience Tray	Inspect	X						
		Replace	X						
061	Mounting Bracket	Replace		.2				01	
07	Frame Assembly	Inspect	X						
		Replace	X						
		Repair		.5				01, 02	
08	Faucet	Inspect	X						
		Replace	X						
081	Barbed Fitting	Replace		.2				01, 02	
09	Support Rods (Male and Female Disconnect)	Inspect	X						
		Replace	X						
		Repair		.5				01, 02	

Table B–1. Maintenance Allocation Chart for Sink Unit Surgical Scrub, Field (Continued)

(1) Group No.	(2) Component/ Assembly	(3) Maintenance Function	(4) Maintenance Category Unit					(5) Tools and Equip.	(6) Remarks
			Unit		Support				
			C	O	F	H	D		
10	Basin Assembly								
102	Brush Pockets	Inspect	X						
		Replace	X						
104	Basin	Inspect	X						
		Replace	X						
		Repair	X						
1041	Drain Fitting	Inspect	X						
		Replace		.2				01	
11	Shipping Container	Inspect	X						
		Replace	X						
111	Handles (2 each)	Inspect	X						
		Replace		.6				01, 02	
112	Fasteners (12 each)	Inspect	X						
		Replace		.6				01, 02	
113	Gasket	Inspect	X						
		Replace		.5				01, 02	
114	Ground Cable	Inspect	X						
		Replace	X						
		Repair		.1				01	

Section III. TOOLS AND TEST EQUIPMENT REQUIREMENTS

Table B–2. Tools and Test Equipment Requirements

Line Item	National/NATO Stock Number	Nomenclature	Maint. Category	Tools or Test Equip. Ref Code
W45334	5180-00-611-7923	Tool Kit, Medical Equipment Maintenance & Repair, Repairman's (SC5180-8-CL-A10)	O, F, H	01
W45197	5180-00-611-7924	Tool Kit, Medical Equipment Maintenance & Repair, Organizational Maintenance (SC 5180-8-CL-A14)	O, F, H	02
M60449	6625-01-265-6000	Multimeter, AN/PSM 45A	O, F, H	03
T61791	6625-01-142-8233	Tester, Current Leakage	O, F, H	05

Section IV. REMARKS

Reference Code

A Where Medical Equipment Repairers are not authorized, the appropriate command(s) will designate responsibility for PMCS.

B Performance will be accomplished by support maintenance levels for units without organic capability.

APPENDIX C

COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS

Section I. INTRODUCTION

C–1 Scope

This appendix lists Components of End Item and Basic Issue Items for the Portable Scrub Sink to help you inventory items required for safe and efficient operation.

C–2 General

The Components of End Item and Basic Issue Items lists are divided into the following sections:

a. **Section II. Components of End Item.** This listing is for information purposes only and is not authority to requisition replacements. These items are part of the end item. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Illustrations are furnished to assist you in identifying the items.

b. **Section III. Basic Issue Items.** These are the minimum essential items required to place the Portable Scrub Sink in operation, to operate it, and to perform emergency repairs. Basic Issue Items (BII) must be with the Portable Scrub Sink during operation and whenever it is transferred between property accounts. The illustrations will assist you with hard-to-identify items. This manual is your authority to request/requisition BII, based on TOE/MTOE authorization of the end item.

C–3 Explanation of Columns

The following provides an explanation of columns found in Table C–1:

a. **Illustration Number**. Column (1) indicates the number of the illustration in which the item is shown.

b. **Description**. Column (2) indicates the Federal Item Name and, if required, a minimum description to identify and locate the item. The last line for each item indicates the CAGE number (in parentheses) followed by the part number.

c. **Unit of Measure (U/M).** Column (3) indicates the measure used in performing the actual operational/maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr).

d. **Quantity Required (Qty RQD).** Column (4) indicates the quantity of the item authorized to be used with/on the equipment.

The following provides an explanation of columns found in Table C–2:

a. **Illustration Number.** Column (1) indicates the number of the illustration in which the item is shown.

b. **National Stock Number.** Column (2) indicates the National Stock Number assigned to the item.

c. **Description.** Column (3) indicates the Federal Item Name and, if required, a minimum description to identify and locate the item.

d. **Unit of Measure (U/M).** Column (4) indicates the measure used in performing the actual operational/maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr).

e. **Quantity Required (Qty RQD).** Column (5) indicates the quantity of the item authorized to be used with/on the equipment.

Section II. COMPONENTS OF END ITEM

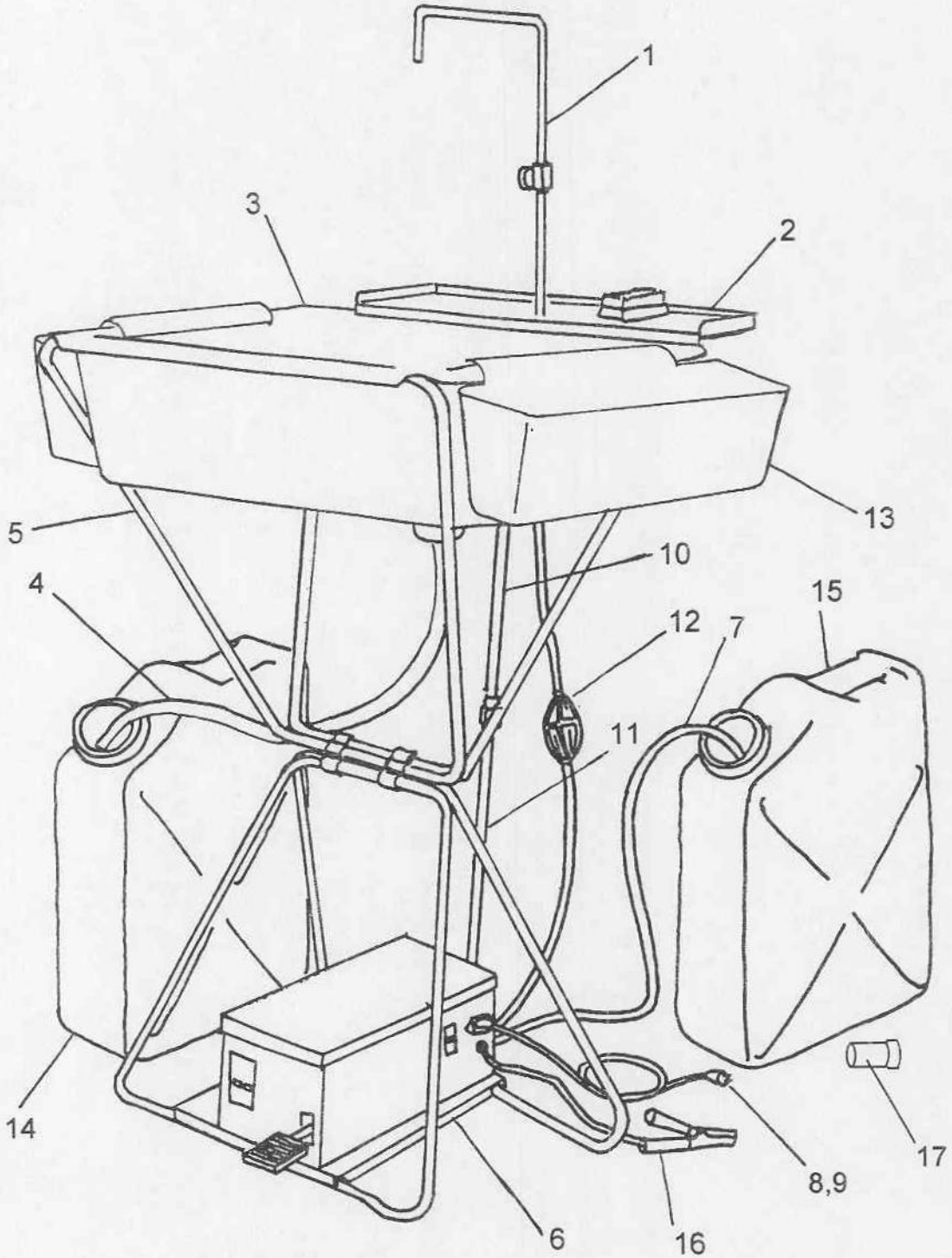


Figure C–1. Components of End Item

Table C–1. Components of End Item

(1) Illustr. No.	(2) Description CAGE Part Number	(3) U/M	(4) Qty RQD
1	Faucet 65709, 30324FD	EA	1
2	Convenience Tray 65709, 40195FD	EA	1
3	Basin 65709, 40196FD	EA	1
4	Drain Hose 65709, 40205FD	EA	1
5	Frame Assembly 65709, 60152FD	EA	1
6	Control Box 65709, 60154FD	EA	1
7	Inlet Hose 65709, 30344FD	EA	1
8	Power Cord 115 V 50/60 Hz 16428, 17016	EA	1
9	Power Cord 230 V 50/60 Hz OMZY1, GBS-1310	EA	1
10	Upper Support Rod 65709, 30337FD-1	EA	1
11	Lower Support Rod 65709, 30337FD-2	EA	1
12	Outlet Hose 65709, 40206FD	EA	1
13	Brush Pocket 65709, 40198FD	EA	2
14	Waste Water Can	EA	1
15	Potable Water Can	EA	1
16	Ground Cable 65709, 30397FD	EA	1
17	Pressure Regulator 65709, G-9227B	EA	1

Section III. BASIC ISSUE ITEMS

Table C–2. Basic Issue Items

(1) Illustr. No.	(2) National Stock Number	(3) Description	(4) U/M	(5) Qty RQD
N/A	5530-00-071-2204	O Ring, Quick Coupling	EA	5
N/A	4730-01-280-4101	Quick Coupling, Female by 1/4" Male NPT	EA	1
N/A	4730-01-317-8460	Quick Coupling, Female by 3/8" Male NPT	EA	1
N/A	4730-01-432-3982	Quick Coupling, Male	EA	1
N/A	4730-01-321-5185	Quick Coupling, Male by 5/16" Male Barb	EA	1
N/A	4730-01-321-5186	Quick Coupling, Male by 1/4" Male NPT	EA	1
N/A	5330-00-599-0776	Washer, Garden Hose Coupling	EA	5
N/A	5920-00-199-9468	Fuse	EA	5
N/A	6685-01-432-3986	Thermostat, RPC-3002, 120° F Shutoff	EA	1
N/A	5930-00-683-2745	Microswitch	EA	1
N/A	6545-01-318-0445	Rebuild Kit, Pump	KT	1
N/A	4520-01-432-4023	Heater Element, RPC-3001, 1200 Watt, 120 Volt	EA	1
N/A	2990-01-134-2503	Primer Bulb	EA	1
N/A	5920-00-142-7439	Holder, Fuse	EA	1
N/A	4710-00-277-6099	Tubing, 1/4 in. xl ft.	EA	1

APPENDIX D

ADDITIONAL AUTHORIZATION LIST

Section I. INTRODUCTION

D–1 Scope

This appendix lists additional items you are authorized for the support of the Portable Scrub Sink.

D–2 General

This list identifies items that do not have to accompany the Portable Scrub Sink and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

D–3 Explanation of Listing

National stock numbers, descriptions, and quantities are provided to help you identify and request the additional items you require to support this equipment. The items are listed in alphabetical sequence by item name under the type document (i.e., CTA, MTOE, TDA, or JTA) which authorizes the item(s).

Section II. ADDITIONAL AUTHORIZATION LIST

Table D–1. Additional Authorization List

(1) National Stock Number	(2) Description	(3) U/M	(4) Qty Auth
7240-00-089-3927	CAN, WATER, Plastic 5-gal capacity	EA	2
6530-01-302-7085	Dispenser, Surgical Detergent, Free-Standing, Foot Operated	EA	1

APPENDIX E

EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

E–1 Scope

This appendix lists expendable supplies and materials needed to operate and maintain the Portable Scrub Sink. These items are authorized to you by CTA 50-970, *Expendable Items* (except Medical, Class V, Repair Parts, and Heraldic Items).

E–2 Explanation of Columns

a. **Item Number**. The number in Column (1) is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use Cloths, cleaning, item 1, Appendix E").

b. **Level**. Column (2) identifies the lowest level of maintenance that requires the listed item.

C - Operator/Crew

c. **National Stock Number**. Column (3) indicates the national stock number assigned to the item; use it to request or requisition the item.

d. **Description**. Column (4) indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the commercial and government entity code in parentheses followed by the part number.

e. **Unit of Measure (U/M)**. Column (5) indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Section II. EXPENDABLE SUPPLIES AND MATERIALS LIST

Table E–1. Components of End Item

(1) Item No.	(2) Level	(3) National Stock Number	(4) Description	(5) U/M
1	C	7920-01-004-7847	Cloth, cleaning	1 RL
2	C	7920-00-619-9162	Brush, scrub nail and hand	1 EA

APPENDIX F

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

F–1 Repair Parts List

This appendix contains illustrations and exploded views of the repairable components of the Portable Scrub Sink.

F–2 Special Tools List

There are no special tools required for maintenance of the Portable Scrub Sink.

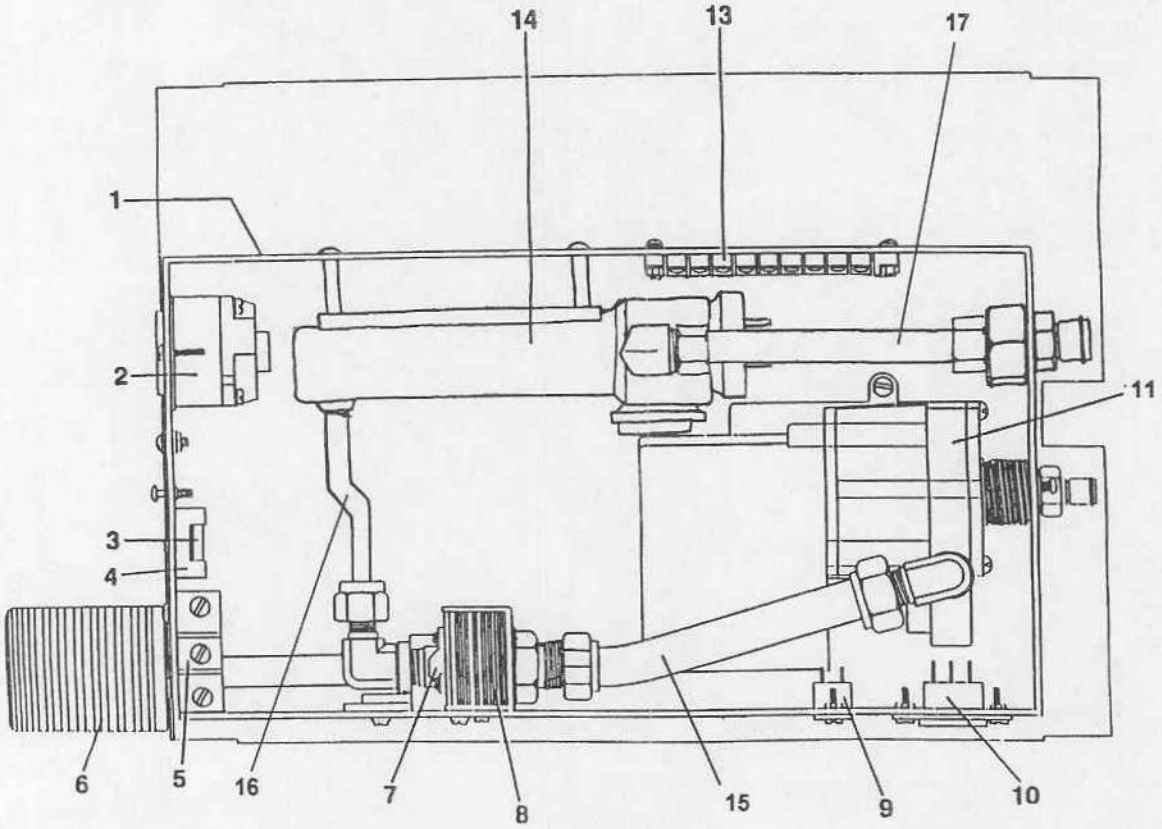


Figure F–1. Control Box

Table F–1. Repair Parts and Special Tools List (RPSTL) — Control Box

Item No.	FSCM	Part No.	Qty.	Description
1	53945	60153FD	1	Control box
2	81091	2081-F1	1	Ground fault circuit interrupter
3	IJY78	AGC-15	1	Fuse
4	75915	357-001	1	Fuse holder
5	3U475	BA-2RB-A2	1	Microswitch
6	53945	20392FD	1	Foot pedal
7	53945	30321FD	1	Foot operated control valve
8	65709	RPC-4000	1	Voltage converter
9	53945	30353FD	1	Power converter switch

Table F–1. Repair Parts and Special Tools List (RPSTL) — Control Box (Continued)

Item No.	FSCM	Part No.	Qty.	Description
10	53945	30352FD	1	Power receptacle
11	53945	40187FD	1	Pump
13	20392FD	8-141	1	Terminal block
14	65709	RPC-3000	1	Heater
15	ID507	ADA00018	1	Tygon Tubing, 7/16 OD x 1/4 1D, braided
16	ID507	ADA00018	1	Tygon Tubing, 7/16 OD x 1/4 1D, braided
17	N/A	N/A	1	3/8 OD x .031 wall, ASTM B-280

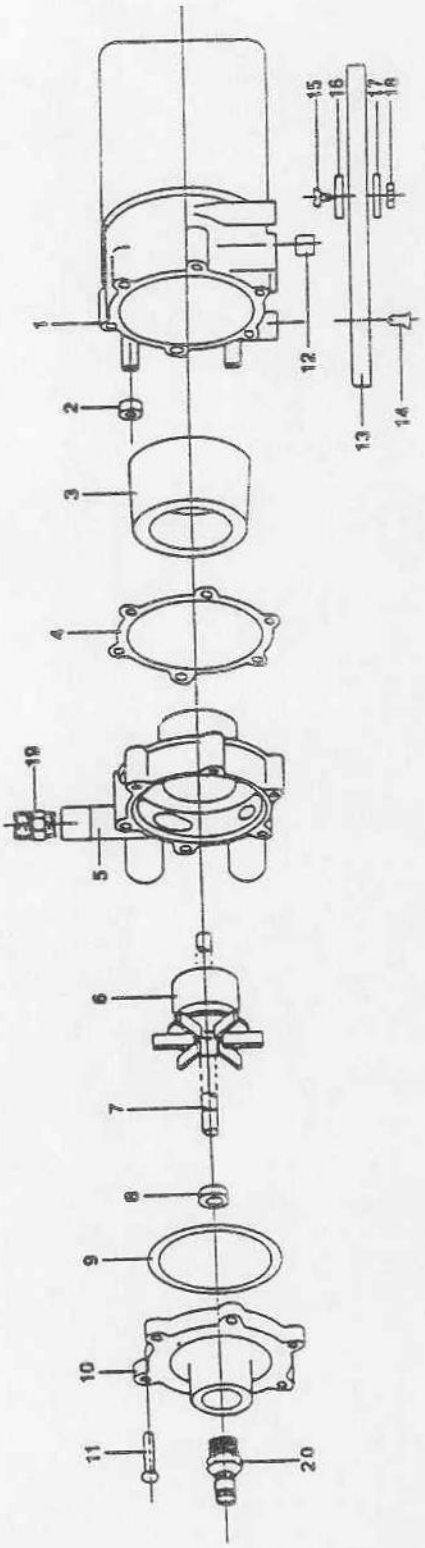


Figure F–2. Water Pump Assembly

Table F–2. Repair Parts and Special Tools List (RPSTL) — Water Pump Assembly

Item No.	FSCM	Part No.	Qty.	Description
1	25795	125-059-02	1	L.C. Epoxy motor, bracket, and cord assembly
2	25795	125-007-10	2	Cooling tube seals, neoprene rubber
3	25795	125-083-01	1	Drive magnet assembly
4	25795	125-071-10	1	Bracket gasket, neoprene rubber
5	25795	125-057-01	1	L.C. pump housing and plug assembly
6	25795	125-055-01	1	Impeller and magnet assembly
7	25795	125-061-10	1	Impeller shaft, ceramic
8	25795	125-028-10	1	Ceramic thrust washer
9	25795	125-065-10	1	Cover O-ring, viton rubber
10	25795	125-056-10	1	Cover
11	25795	125-013-10	6	Cover screws
12	25795	125-026-10	1	Bracket pipe plug
13	25795	125-060-10	1	Mounting base
14	25795	125-018-10	4	Base screws
15		.190-24UNCX.75LG	2	Mounting screws
16		.2191DX.5000D	2	Washers
17		.2031DX.3370D	2	Lock washers
18		.190-24UNC-2B	2	Nuts
19	11649	B-6-RB-4	1	Bushing
20	0DRP9	PLC240-06	1	Male quick coupling

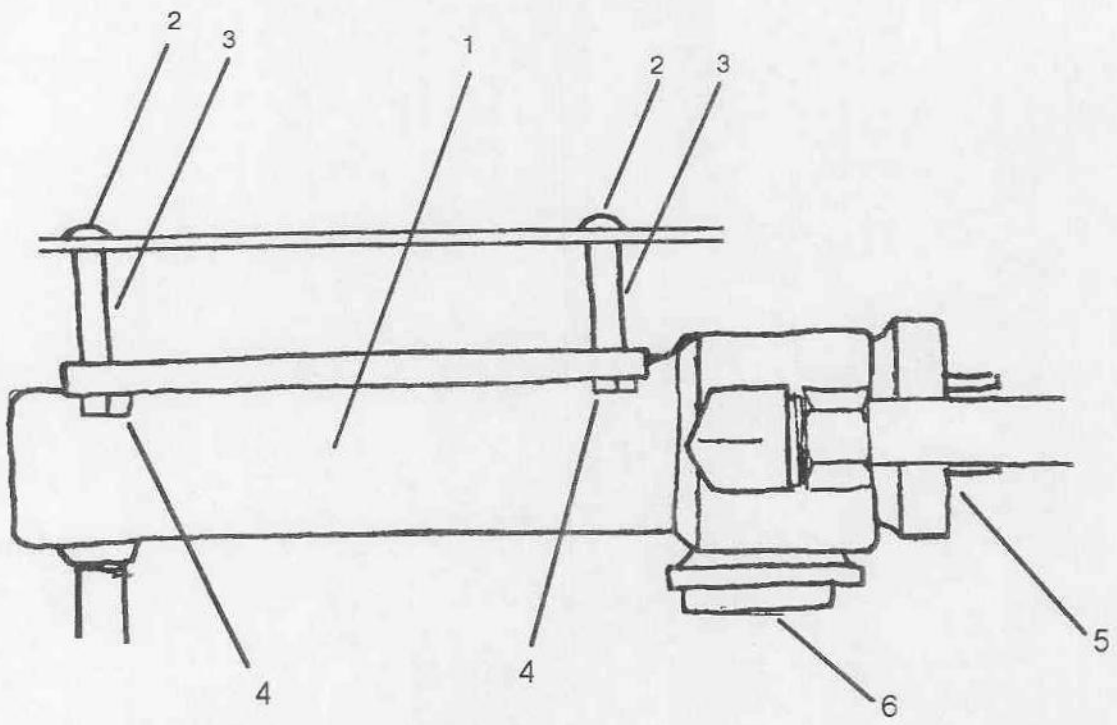


Figure F–3. Heater Assembly

Table F–3. Repair Parts and Special Tools List (RPSTL) — Heater

Item No.	FSCM	Part No.	Qty.	Description
1	65709	RPC-3003	1	Heater Housing
2		#6 x 1" CRES	2	Mounting screws
3		#6 x 3/4" LONG	2	Spacer bushings
4		#6-32 Lock, CRES	2	Nuts
5	65709	RPC-3001	1	Heater element
6	65709	RPC-3002	1	Thermostat

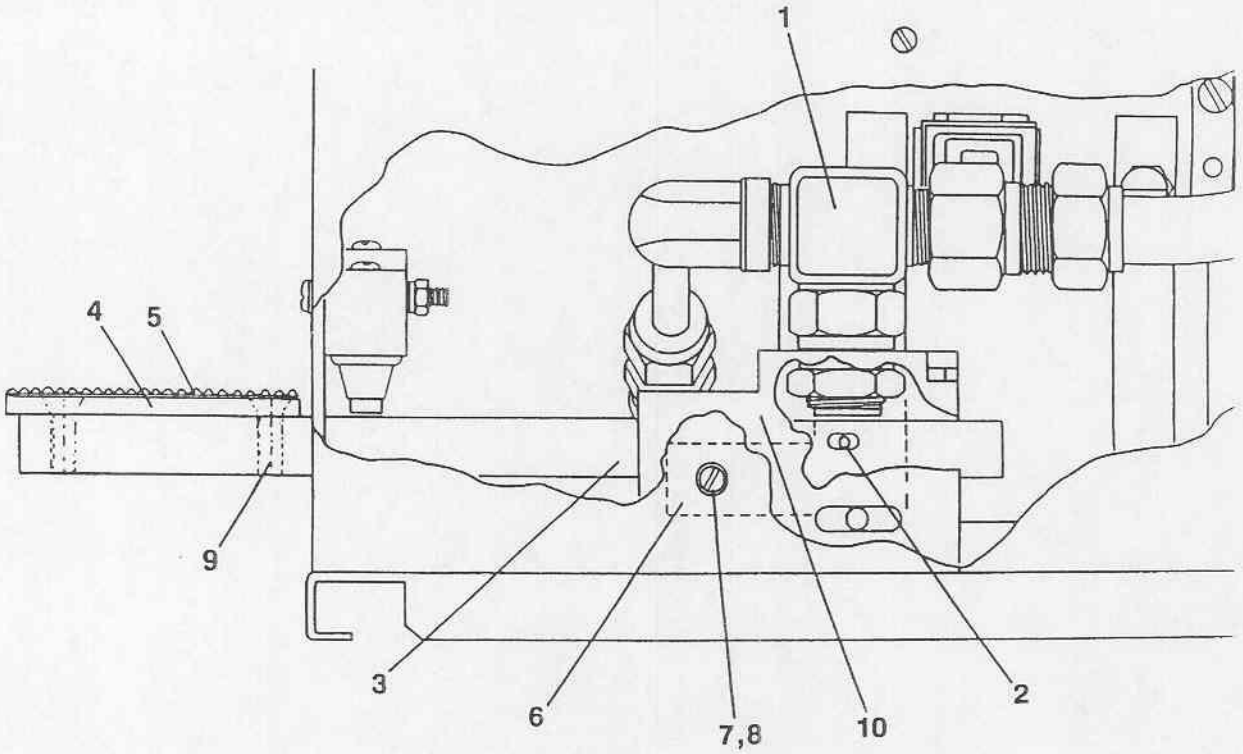


Figure F–4. Foot Operated Control Valve

Table F–4. Repair Parts and Special Tools List (RPSTL) —Foot Operated Control Valve

Item No.	FSCM	Part No.	Qty.	Description
1	53945	30321FD	1	Valve
2		.0940DX.500LG	1	Pin
3	53945	30350FD	1	Arm
4	53945	20392FD	1	Pedal
5	53945	20391FD	1	Pad
6	53945	20314FD	1	Locking plate
7		.190-24UNCX.500LG	3	Screws
8		.2191DX.500D	3	Washers
9		.164-32UNCX.625LG	2	Screws
10	53945	30329FD	1	Bracket

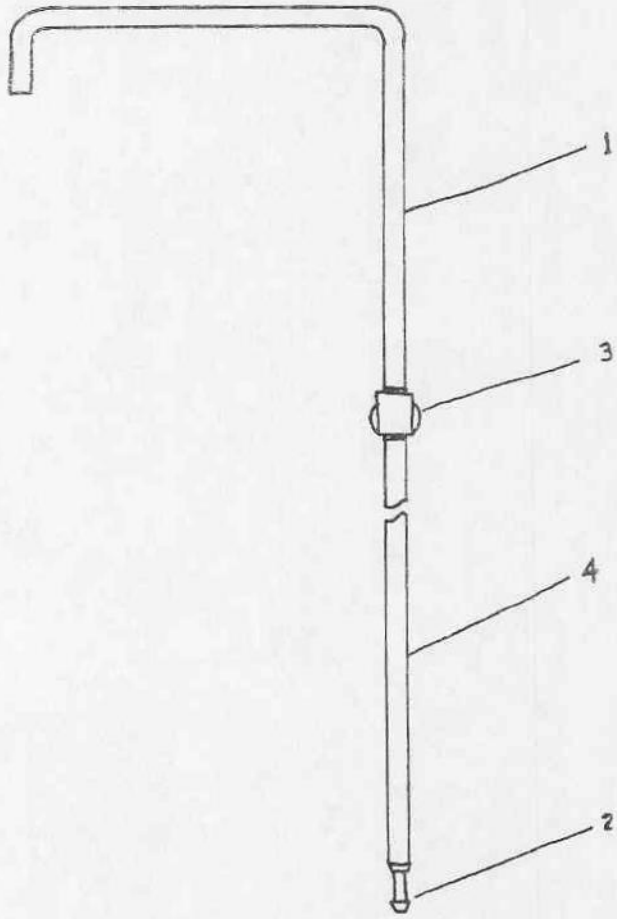


Figure F–5. Faucet

Table F–5. Repair Parts and Special Tools List (RPSTL) — Faucet

Item No.	FSCM	Part No.	Qty.	Description
1	53945	30323FD	1	Faucet, upper
2	0AVX1	1551	1	Barbed fitting
3	12623	B-2JN2-7725	1	Flow control valve
4	53945	30323FD	1	Faucet, lower

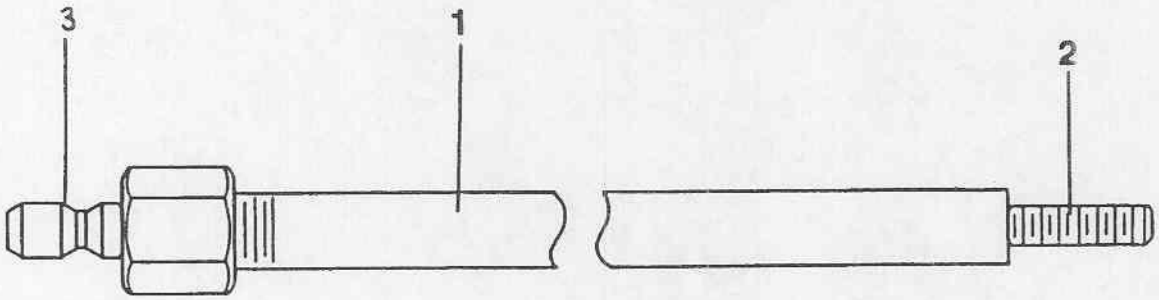


Figure F–6. Upper Support Rod

Table F–6. Repair Parts and Special Tools List (RPSTL) — Upper Support Rod

Item No.	FSCM	Part No.	Qty.	Description
1	53945	3034FD	1	Upper support rod
2	53945	20380FD.50	1	Threaded stud
3	95138	B-QF4-S-4PF	1	Quick disconnect (male)

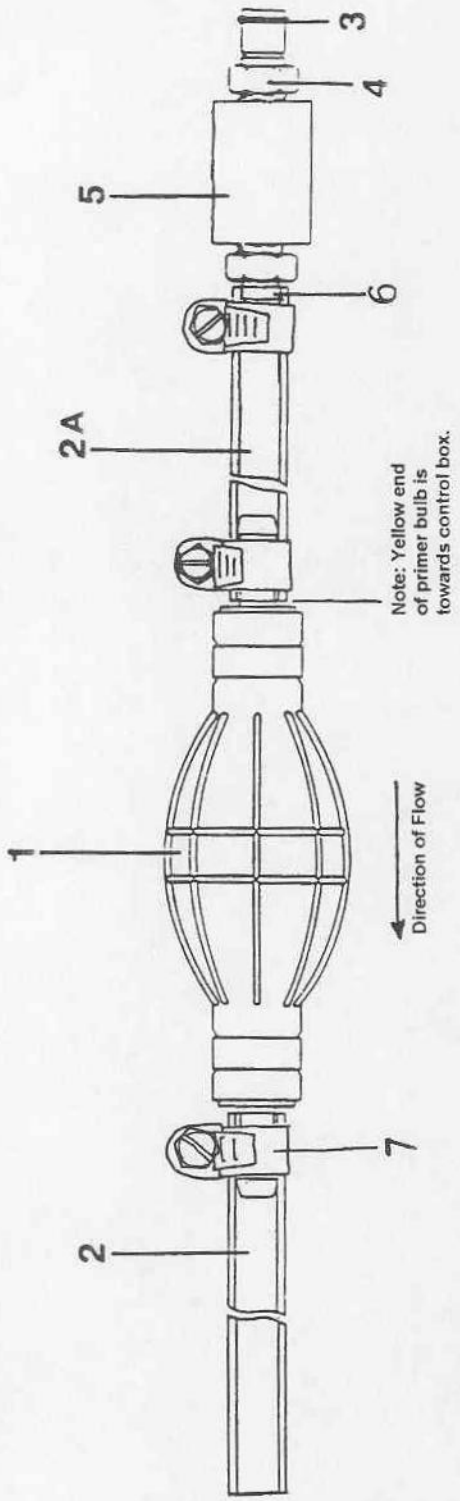


Figure F–7. Outlet Hose

Table F–7. Repair Parts and Special Tools List (RPSTL) — Outlet Hose

Item No.	FSCM	Part No.	Qty.	Description
1	5S187	89396A38	1	Primer bulb
2	1DS07	B-44-4X	1	Tygon tubing
2A	IDS07	B-44-4X	1	Tygon tubing
3	ODRP9	1003-11	1	O-Ring
4	ODRP9	PLC240-04	1	Male quick coupling
5	05668	N-06349-01	1	Threaded coupling
6	05668	N-06478-01	1	Barbed fitting
7	35708	620-036-006	4	Hose clamps

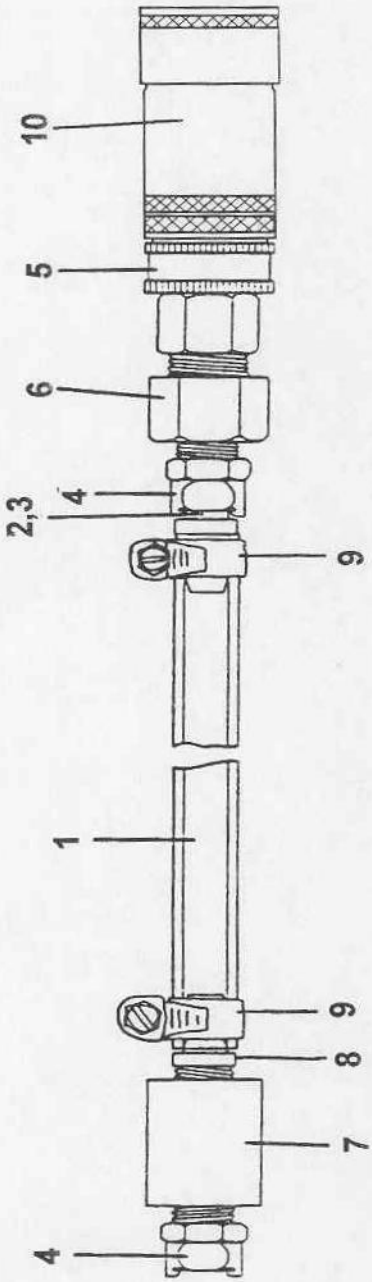


Figure F–8. Inlet Hose

Table F–8. Repair Parts and Special Tools List (RPSTL) — Inlet Hose

Item No.	FSCM	Part No.	Qty.	Description
1	1DS07	B44-4X	1	Tygon tubing
2	ORDP9	PLC220-05	1	Male quick coupling
3	ORDP9	1003-11	1	O-Ring
4	ORDP9	PLC100-06	2	Female quick coupling
5	65709	3523	1	Brass hose connector
6	05668	N-06349-34	1	Reducer fitting
7	05668	N-06349-02	1	Threaded coupling
8	74932	N5MCB-6	1	Barbed fitting
9	35708	620-036-006	2	Hose clamps
10	65709	G-9227B	1	Pressure Regulator

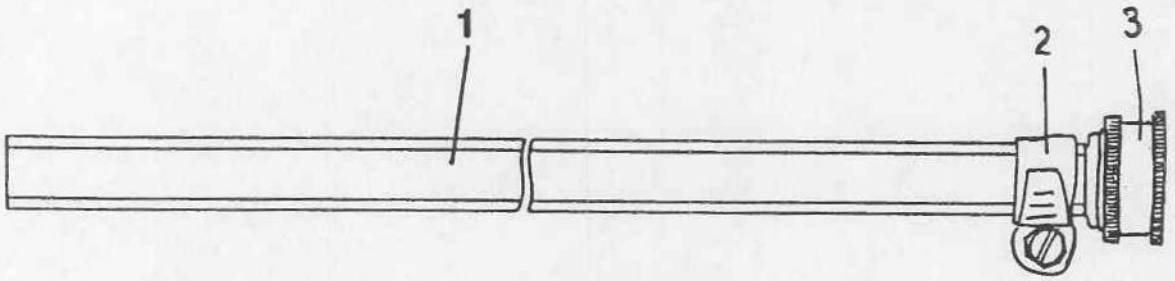


Figure F–9. Drain Hose

Table F–9. Repair Parts and Special Tools List (RPSTL) — Drain Hose

Item No.	FSCM	Part No.	Qty.	Description
1	1DS07	B44-4X	1	Tygon tubing
2	35708	620-036-012	1	Hose clamp
3	65709	3528F	1	Swivel hose connector

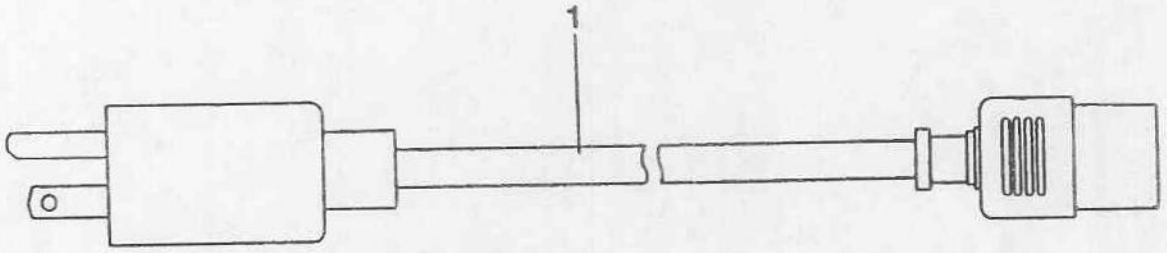


Figure F–10. Power Cord, 115V

Table F–10. Repair Parts and Special Tools List (RPSTL) — Power Cord, 115V

Item No.	FSCM	Part No.	Qty.	Description
1	53945	30354FD	1	Cord, power, 115V; 15 Amp, hospital grade

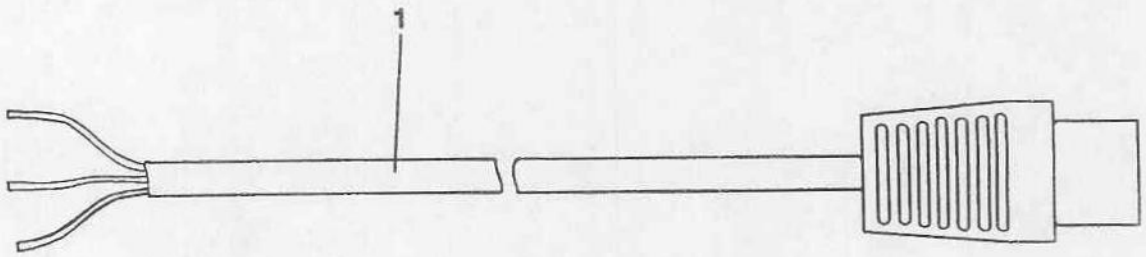


Figure F–11. Power Cord, 230V

Table F–11. Repair Parts and Special Tools List (RPSTL) — Power Cord, 230V

Item No.	FSCM	Part No.	Qty.	Description
1	53945	30355FD	1	Cord, power, 230V

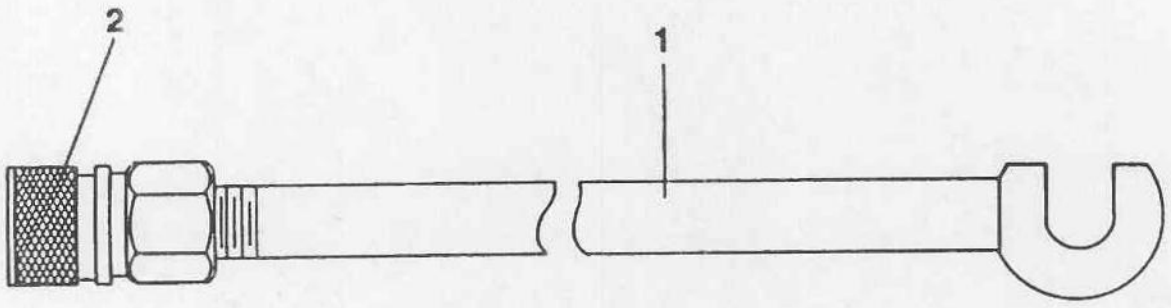


Figure F–12. Lower Support Rod

Table F–12. Repair Parts and Special Tools List (RPSTL) — Lower Support Rod

Item No.	FSCM	Part No.	Qty.	Description
1	53945	30306FD	1	Lower support rod
2	95138	B-QF-4-B-4PF	1	Female disconnect

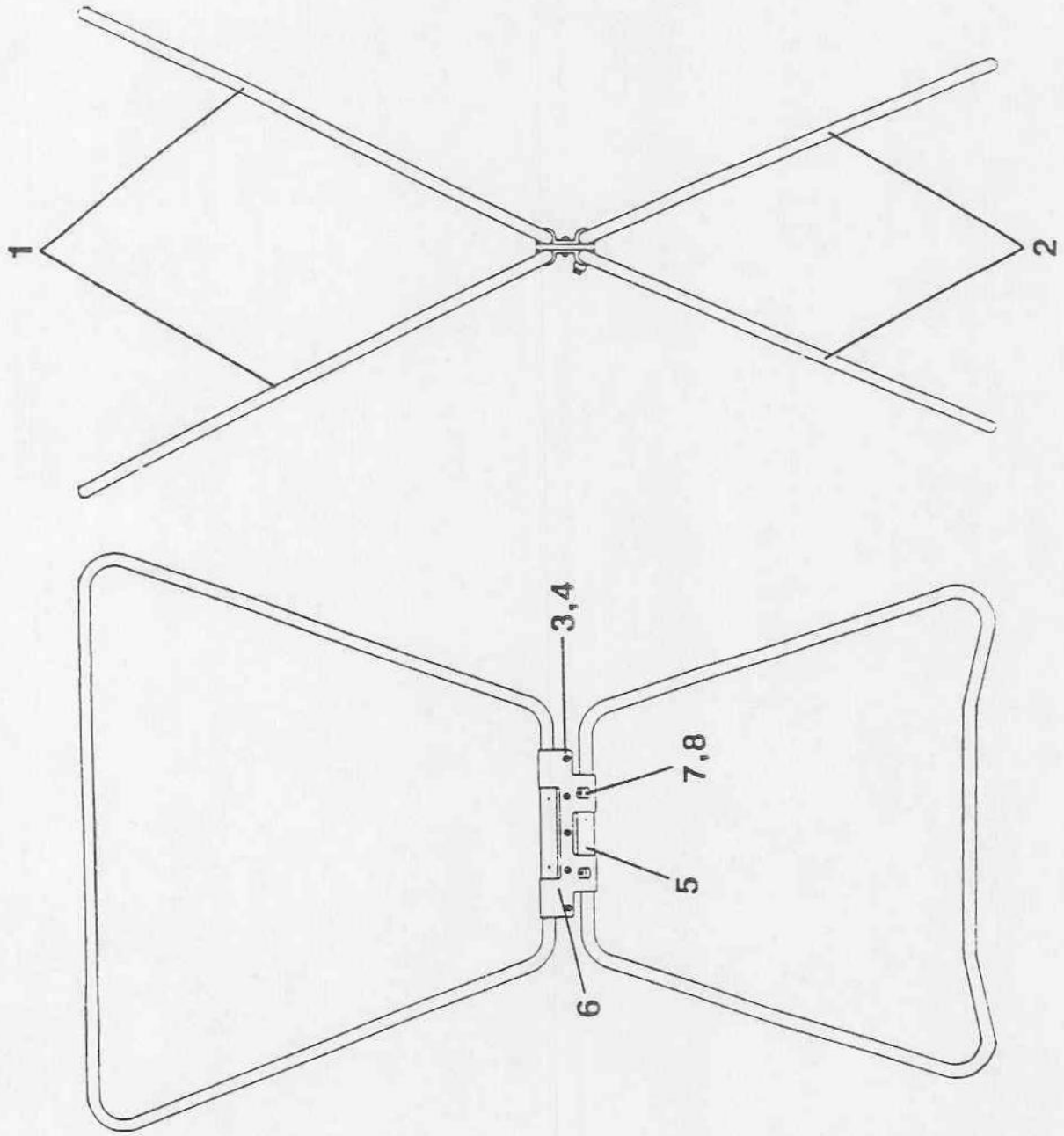


Figure F–13. Frame Assembly

Table F–13. Repair Parts and Special Tools List (RPSTL) — Frame Assembly

Item No.	FSCM	Part No.	Qty.	Description
1	53945	40186FD	2	Upper legs
2	53945	40185FD	2	Lower legs
3		.138-32UNCX.75LG	5	Screws
4		.138-32UNC-3B	5	Hex nuts
5		0940DX.562LG	8	Spring pins
6	53945	40192FD	1	Hinge
7		.190-24UNCX.75LG	2	Allen screws
8	53945	20381FD	2	Lock spacers

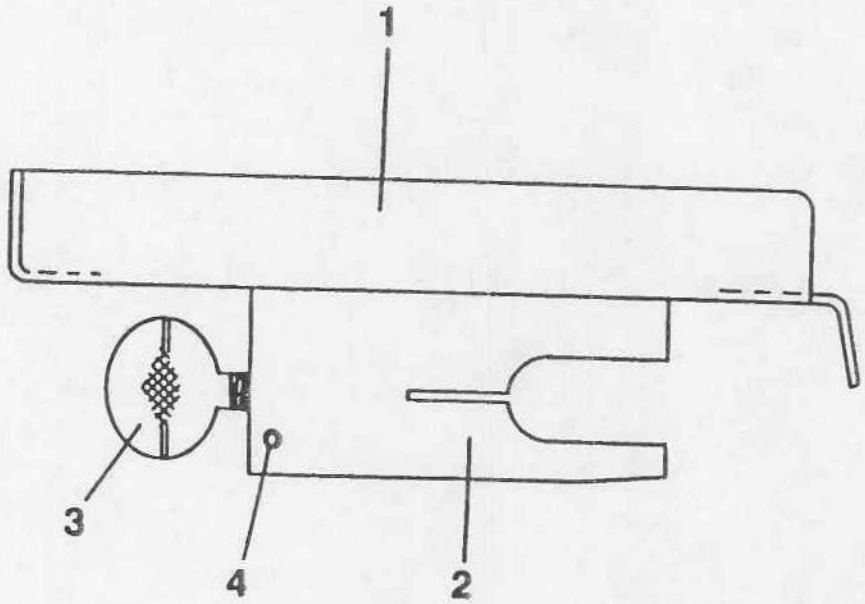


Figure F–14. Convenience Tray

Table F–14. Repair Parts and Special Tools List (RPSTL) — Convenience Tray

Item No.	FSCM	Part No.	Qty.	Description
1	53945	40183FD	1	Tray
2	53945	30311FD	1	Tray bracket
3	53945	20387FD	1	Thumb screw
4		.0940DX1.00LG	1	Spring pin